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VSIT | Vidyalankar School of Information Technology
NAAC ACCREDITED COLLEGE

INTERNATIONAL MULTI-DISCIPLINARY CONFERENCE

Theme
Policy Initiatives of Government of India - *Appraisal & Assessment*

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MUMBAI

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MUMBAI

Guest Editor of Special Issue

Dr. (Mrs.) Rohini Kelkar

Principal

Vidyalankar School of Information Technology, Mumbai

ABOUT VSIT

Vidyalankar School of Information Technology (VSIT) is a part of Vidyalankar Dnyanpeeth Trust situated in Mumbai and is affiliated to the University of Mumbai. It was established in the year 2002. VSIT offers both graduate and post-graduate programmes in the subjects of Information Technology, Commerce and Management. It is a NAAC accredited college that aims to impart Quality Education in the field of Science, Commerce and Management. VSIT has tie-ups with renowned Foreign Universities like Penn State University, Rutgers University, California State University, University of Toledo, University of South Carolina and many more. The mission of the institute concerns the creation of an educational environment where students can reach their full potential in their chosen discipline and also a scholarly environment where the talents of both the faculty members and students are nurtured and used to create knowledge and technology for the benefit of the society. Fostered in the values expounded by the erudite founders C. S. Deshpande and Dr. Sanjeewani Deshpande and currently propelled under the able leadership of the zealous Vishwas Deshpande, VSIT is driven to set the highest standards in teaching and research.

ABOUT VCMT

Academia is a fertile ground for germination of new ideas and innovation. Teaching is no longer the sole functional role of educators. Considerable academic efforts involve research and learning to enable educators to become facilitators and contributors to knowledge. Every academic circle aims to expand its creative and contributory capacity. VSIT conducts an annual national research conference named V-CMT, formerly known as VISMIT. The conference aims to inculcate the inclination towards and augment an educator's knowledge of their respective fields of expertise through research. It works to congregate ideas and to enable an understanding of new perspectives and paradigms not only for the teaching faculties of the institute but also for those from other institutes and the industry.

VSIT has been building its VCMT conference since last 5 years it's one of the fertile grounds for germination of new ideas and innovation keeping this in mind this year VCMT 2019 has been focussed on the theme **" Policy Initiatives of Government of India - Appraisal & Assessment"** . The objective of the conference is measuring the impact of government initiatives and policies through its merit, worth and utility of the same implemented in various sectors. The conference will evaluate the polices the tracks Economic ,Social and Role of technology in implementation of policies.

This conference will bring together visionaries from different sectors to identify practical strategies and discuss the best practical approaches to build a strong developed nation .

ABOUT IARA

Indian Academicians and Researchers Association (IARA) is an educational and scientific research organization of Academicians, Research Scholars and practitioners responsible for sharing information about research activities, projects, conferences to its members. IARA offers an excellent opportunity for networking with other members and exchange knowledge. It also takes immense pride in its services offerings to undergraduate and graduate students. Students are provided opportunities to develop and clarify their research interests and skills as part of their preparation to become faculty members and researcher. Visit our website www.iaraedu.com for more details.

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MESSAGES

Message from Principal

Vidyalankar School of Information Technology (VSIT), a Commerce, IT and Management college affiliated to University of Mumbai, has always been organising activities pertaining to the current topics of interest to the academicians, industrialists, students and all other stakeholders of an education system. The theme of V-CMT 2019 - an international multi-disciplinary Conference - "Policy initiatives of Government of India - Appraisal and assessment" falls in the same tradition. India is going through a series of major policy initiatives in her journey towards becoming a world leader. Under this scenario, understanding and critically evaluating the policy initiatives is the most wanted exercise. V-CMT 2019 has encouraged a fair and free participation of scholars in this exercise. We have received many good research papers in various tracks. Even the students have expressed themselves through research papers on current issues. I take this opportunity to thank everyone who has contributed towards a fruitful organisation of the Conference.

Dr. (Mrs.) Rohini Kelkar
Principal
Vidyalankar School of Information Technology
Mumbai

Message from Steering Committee Member

The VSIT is arranging two-Day National Conference V-CMT 2019 on February 8-9, 2019.The theme chosen is “POLICY – INITIATIVES OF GOVT. OF INDIA – APPRAISAL AND ASSESSMENT”. The principal objectives of the Conference are – *A. To appraise and assess the various policy initiatives undertaken by the Government in Economic and Social spheres, and, B. To evaluate the implementation of technologies utilised in public policy.* The invited Expert Speakers and the Panellists will share their views and insights on specific themes related to Socio-Economic Policies. A better understanding of the implications of the Policy-framework currently operating in India, can be achieved in these three tracks through Experts-talks and Panel-Discussion. The conference also aims to encourage Teachers and Students to contribute research paper on these themes. VCMT-2019 has received an overwhelming response. Several papers were received from faculties as well as students. This volume puts together the selected papers which have been reviewed and edited by the committee. We sincerely hope that the contents of this volume proceeding will be of use and value to the teachers as well as students of Commerce, Management and Information Technology.

Dr. Chandrahas Deshpande
Adjunct Faculty, Commerce and Management
Vidyalankar School of Information Technology
Mumbai

Message from Steering Committee Member

Over last few years, V-CMT has picked up different tracks in context of the theme of "Vision for the Next Decade". The focus of this year's theme is to critically look at the policies and initiatives taken by the government, their impact, the achievements and the obstacles. The tracks deal with various aspects that directly or indirectly impact the livelihood, improvement in business/lifestyle and the ease of carrying out our activities. Technology has been an integral part of the initiative roll-outs. Hence the third track deals with the technology initiatives and frameworks that support these policies. As part of this publishing, we bring you a blend of analysis of the current initiatives, their shortcomings and other alternatives to help us succeed in this endeavour. We hope this helps us take the next leap towards progress and success.

Mr. Makarand Deshpande
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ECONOMIC POLICIES

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AN ASSESSMENT OF THE TAX IMPOSED ON LONG TERM CAPITAL GAINS ON EQUITY ORIENTED MUTUAL FUNDS IN INDIA

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CMA (USA), PGDFM, M. Com., B. Com

ABSTRACT

Individuals today are relatively risk- tolerant when it comes to investments and are open to investing their monies into the equity markets. Most common way of doing so is through equity mutual funds. The gains made from short term investments are taxed at a flat rate of 15%. However, the gains made from long term investments i.e. those held for more than a year, were considered completely exempt from taxation during last few years. This was believed to incentivise the investors to stay invested for longer term.

The Budget 2018 had proposed that the Long Term Capital Gain (LTCG) should be taxed at 10% on the amounts exceeding INR 100,000 per individual during each financial year. The law provides that calculation of taxable LTCG must be made following the prescribed guidelines. Hence inculcating a deep understanding of the computation of such tax is crucial for assessing its impact.

Through this paper, the researcher intends to present in a simplified manner, how LTCG would be computed for tax purposes taking several scenarios into consideration and also aims at assessing its impact on the investors' earnings.

Keywords: Long Term Capital Gain, Tax on Long Term Capital Gain, Equity Mutual Funds, Equity Investments, Budget 2018

1. INTRODUCTION

In an environment where it is difficult to make one's ends meet just by a fixed income source, individuals are being open to investing in the economy through equity markets for better returns. The data below suggests a change in investing patterns of individuals over the years.

Financial Assets of the Indian Households (2012-18) (in Rs Billon & at approx current prices)

Year	Bank Deposits	Non-Banking Deposits	Life Insurance Funds	Provident & Pension Funds	Shares & Debentures
2012-13	5,751	279	1,799	1,565	170
2013-14	6,393	228	2,044	1,778	189
2014-15	6,027	289	2,992	1,908	203
2015-16	6,220	182	2,660	2,917	448
2016-17	9,418	250	3,491	3,020	362
2017-18	4,753	208	3,272	3,496	1,509

* Life Insurance Fund includes Central or State Governments employees' insurance funds and postal insurance funds.
* Shares and Debentures include investment in shares and debentures of credit / non-credit societies, public sector bonds and mutual funds (other than Specified Undertaking of the UTI).

ReLakhs.com

From the above data, it is observed that bank deposits have seen a steep decrease while the investment in shares and debentures has increased substantially. Individuals have started parking their monies into the equity share markets. There are many vehicles to investing into the share markets and equity Mutual Funds is one such vehicle.

A mutual fund is a professionally managed investment fund wherein money from investors is pooled in to purchase securities. The fund manager is an expert who is constantly monitoring the market movement and acting on the investors' behalf. Mutual fund is an excellent tool to mitigate the volatility of the markets and book profits. Generally, a novice would go in for mutual funds rather than the direct equities.

Equity oriented mutual funds are those that invest at least 65% or more of its portfolio in equities. Such funds offer options to investors such as growth or dividend. Under the growth option, the dividends paid by shares are reinvested thereby increasing the Net Asset Value (NAV) and providing cumulative returns upon sale of such units. However, under the dividend option, such dividends are paid out to the investors.

When the mutual fund units are sold within less than one year, the gain arising out of such sale is called Short Term Capital Gain (STCG) and is taxed at 15% irrespective of the individual's income slab. But when the units are held for more than one year and sold for a gain, such a gain is called Long Term Capital Gain (LTCG).

In recent years, LTCG on equity mutual funds was exempt from taxation until 1st April 2018. The Budget 2018 introduced a tax on LTCG at 10% of the gain exceeding INR 100,000 per individual for each financial year. Such levy of tax may have sounded high and hurt the market sentiment. However, the LTCG for tax purposes should be computed differently, as per the guidelines.

FUNDS UNDER THE STUDY

1. Kotak Standard Multicap Fund
   {known as Kotak Select Focus Fund before 25th May 2018}
2. Axis Bluechip Equity Fund
   {known as Axis Equity Fund before 18th May 2018}
3. ICICI Prudential Bluechip Equity Fund
   {known as ICICI Prudential Focused Bluechip Fund before 28th May 2018}

2. OBJECTIVES OF THE STUDY

1) To study the estimation of actual and taxable LTCG on equity mutual funds.
2) To understand the computation of LTCG Tax on equity mutual funds.
3) To assess the impact of LTCG Tax on individuals' earnings.

3. METHODOLOGY

The study has been conducted purely on the basis of secondary data available on various websites.

4. LIMITATIONS OF THE STUDY

1) The research paper focuses only on monies invested into equity oriented mutual funds through broker and/or distributor (regular plan).
2) The period considered for study is 30 calendar months starting from March 2016 till August 2018.

5. DATA ANALYSIS

Let us consider a hypothetical example wherein an individual invested a sum of INR 750,000 into the regular plans of the following mutual funds with Growth option on 1st March 2016:

Mutual Fund Scheme	#Units	Purchase Nav	Purchase Value
Axis Bluechip Equity Fund	14543.33	17.19	250000
ICICI Prudential Bluechip Equity Fund	9746.59	25.65	250000
Kotak Standard Multicap Fund	12139.46	20.594	250000
TOTAL INVESTMENT			**750000**

Data source: https://www.amfiindia.com/net-asset-value/nav-history

5.1 Scenario I: Sale on 1st March 2018 (between 1st February 2018 and 31st March 2018)

Having earned an adequate return, the individual sold of the investments on 1st March 2018.

Mutual Fund Scheme	#Units	Purchase Nav	Purchase Value	Sale Nav	Sale Value	Profit
Axis Bluechip Equity Fund	14543.33	17.19	250000	24.87	361692.62	111693
ICICI Prudential Bluechip Equity Fund	9746.59	25.65	250000	39.70	386939.62	136940
Kotak Standard Multicap Fund	12139.46	20.594	250000	32.56	395248.68	145249
TOTAL LONG TERM CAPITAL GAIN						**393881**

The sale of mutual fund units fetched a LTCG of INR 393,881. Since the LTCG tax was to be imposed w.e.f. 1st April 2018, this entire gain would have been exempt from taxation as it was earned during the financial year ended 31st March 2018.

5.2 Scenario II: Sale on 31st August 2018 (after 1st April 2018)

Suppose, the individual stayed invested for a few more months and sold of all the units on 31st August 2018, the LTCG earned would have been INR 524,476. As this gain was earned after 1st April 2018, it would have been subject to LTCG tax.

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Mutual Fund Scheme	#Units	Purchase Nav	Purchase Value	Sale Nav	Sale Value	Profit
Axis Bluechip Equity Fund	14543.33	17.19	250000	28.79	418702.47	168703
ICICI Prudential Bluechip Equity Fund	9746.59	25.65	250000	43.38	422807.07	172807
Kotak Standard Multicap Fund	12139.46	20.594	250000	35.67	432965.98	182966
TOTAL LONG TERM CAPITAL GAIN						**524476**

Let us now understand how the tax on LTCG would be computed for tax purpose. The guidelines suggest that, the LTCG for tax purposes be calculated at the sale amount exceeding the valuation as on 31st January 2018 or the original cost, whichever is higher. If the original cost is lower, the valuation as on 31st January 2018 is considered as the base cost. In other words, the law provides that LTCG made up till 31st January 2018 be exempt from taxation.

Mutual Fund Scheme	#Units	Nav As On 31.01.2018	Base Value	Sale Nav	Sale Value	Profit
Axis Bluechip Equity Fund	14543.33	25.38	369110	28.79	418702.47	49593
ICICI Prudential Bluechip Equity Fund	9746.59	41.77	407115	43.38	422807.07	15692
Kotak Standard Multicap Fund	12139.46	34.07	413591	35.67	432965.98	19375
TOTAL LONG TERM CAPITAL GAIN						**84659**
Less: Exemption						100000
Taxable LTCG						NIL

Although, the LTCG previously computed amounted to INR 524,476, the same for the purpose of taxation amounted to only INR 84,659. The individual would have to pay no tax thereon as the gain is within the exemption limit of INR 100,000. So even if the Government introduced LTCG tax at 10%, the impact on the above portfolio stayed negative.

5.3 Scenario III: Investing higher amount on 1st March 2016 and sale on 31st August 2018 (after 1st April 2018)

Let us assume that instead of INR 750,000 being invested into three funds, the individual had invested a sum of INR 1,050,000 equally in the same three funds. The allocation of units under each fund would have been as follows:

Mutual Fund Scheme	#Units	Purchase Nav	Purchase Value
Axis Bluechip Equity Fund	20360.67	17.19	350000
ICICI Prudential Bluechip Equity Fund	13645.22	25.65	350000
Kotak Standard Multicap Fund	16995.24	20.594	350000
TOTAL INVESTMENT			**1050000**

Assuming that the individual sold of all the above units on 31st August 2018, the LTCG would be INR 734,266.

Mutual Fund Scheme	#Units	Purchase Nav	Purchase Value	Sale Nav	Sale Value	Profit
Axis Bluechip Equity Fund	20360.67	17.19	350000	28.79	586183.69	236184
ICICI Prudential Bluechip Equity Fund	13645.22	25.65	350000	43.38	591929.64	241930
Kotak Standard Multicap Fund	16995.24	20.594	350000	35.67	606152.23	256152
TOTAL LONG TERM CAPITAL GAIN						**734266**

For taxation purpose, LTCG would have been computed as

Mutual Fund Scheme	#Units	Nav As On 31.01.2018	Base Value	Sale Nav	Sale Value	Profit
Axis Bluechip Equity Fund	20360.67	25.38	516754	28.79	586183.69	69430
ICICI Prudential Bluechip Equity Fund	13645.22	41.77	569961	43.38	591929.64	21969
Kotak Standard Multicap Fund	16995.24	34.07	579028	35.67	606152.23	27124
TOTAL LONG TERM CAPITAL GAIN						**118523**
Less: Exemption						100000
Taxable LTCG						18523
LTCG Tax @ 10%						**1852**

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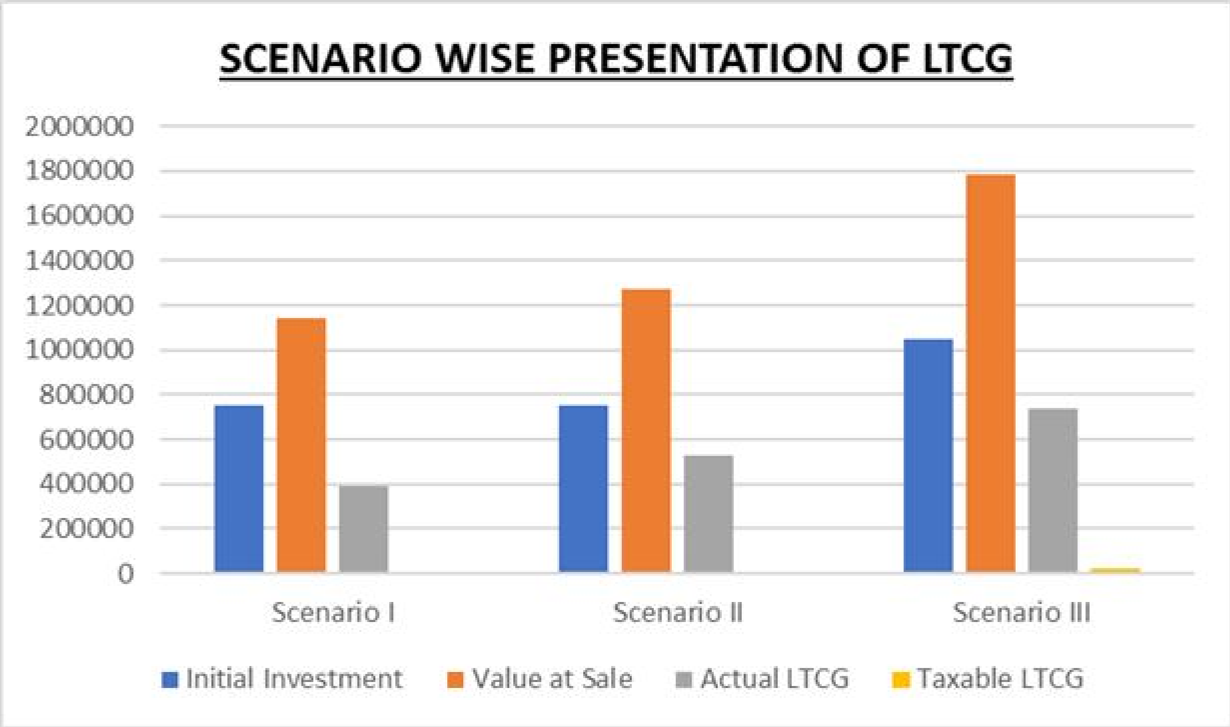
The LTCG for tax purpose amounts to INR 118,523 after considering the valuations on 31st January 2018 as the base cost. LTCG tax would be applicable at 10% on the gain exceeding INR 100,000. Therefore, we can now see that although the LTCG was 734,266, the same considered for taxability had shrunk to INR 18,523 after claiming exemption of INR 100,000. Tax payable on such LTCG would have been INR 1852, which looks meagre compared to the actual LTCG made.



6. CONCLUSION

At first, it looks as if the LTCG tax would have a huge impact on individuals gains. The Government was criticised for imposing this tax on LTCG. It was even argued that the LTCG would disincentivize (discourage) individuals to stay invested in the markets for a longer term. However, it is only through deeper understanding of the LTCG tax working, that one realises, how minimal its impact is (at times even negligible). Government views this as a progressive tax since it will impact mainly HNIs (High Net Worth Individuals) who invest large sums in the stock market. The middle class investors are believed to be indifferent to this tax. Furthermore, such tax will prove to be an additional source of income for the Government.

The great Albert Einstein had once said, “Compounding interest is the eighth wonder of the world. He who understands it, earns it. He who doesn’t, pays it”. If we hope to compound our returns, we must invest in the right tools, at an opportune time and hold on for the right horizon of time. Happy investing!

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PRADHAN MANTRI KAUSHAL VIKAS YOJANA AND TRUCKNG INDUSTRY IN INDIA: A WAY AHEAD FOR BETTERMENT

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ABSTRACT

Right from the beginning of planning exercise in India, along with other targets one of the major targets even today also is generation of employment and reduction of unemployment in our economy. During various plan periods all respective governments put their best efforts to tackle the issue of unemployment in particular. Although it has been observed that over periods of time the rate of unemployment has declined along with ever increasing population of our country, still good portion of our population is unemployed in absolute term. Thus, in order to generate more employment and make our population employable, our government realized that training and skill development is something which they need to provide to our youth to make them more employable. Hence, in this connection Government of India has set-up Ministry of Skill Development and Entrepreneurship (MSDE) to provide outcome-based skill training to its youth through the flagship programme namely "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" with an aim to enable Indian youth more efficient and employable. There are various sectors where PMKVY is playing important role by providing skill training to the youth and make them employable in those sectors. Among all those sectors, transport sector in general and trucking industry in particular also plays an important role in overall economic growth and development of our economy with an estimated share of around 6.5% (Transport) and 4.6% (Road Transport) in our GDP. Further, road transport in general and trucking industry in particular is also one of the major contributor in employment generation in our economy and thus it also required more manpower with appropriate skill and training, so this sector can grow and proceed further.

However, trucking industry in particular is facing major challenge with reference to skilled man power especially river and cleaner. Due to this, it add to the cost to nation in terms of accident, slow movement, reckless driving and congestion, traffic jams, more fuel consumption , etc. Thus, in this paper an attempt is being made to access and appraise policy initiative of Government of India in the form of Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and its impact on trucking industry in India with reference to trained and skill drivers and cleaners under PMKVY Program.

Keywords: Employment, Skills & Training, Transport, Policy, Government.

1. INTRODUCTION

With the increase in population of our country over period of time, the demand for various goods and services also increased along with increase in agricultural and industrial sector output. Accordingly the demand for transportation also increased to make available those goods and services. Thus, overall demand for transportation services in general and trucking industry services in particular has increased many folds. Given below in the Table 1 the growth of truck population in India:

Table-1: Growth of Trucking Industry in India

Year	Truck Population(in Thousand)
2001	2948
2005	4031
2010	6432
2015	9344
Source: Transport Research Wing, Ministry of Shipping, Road Transport and Highways.	

Thus, with the increase in demand for trucking industry, the number of trucks has also increased as shown in Table 1. However, this ever increasing truck population required more skilled and trained manpower directly and indirectly, especially direct manpower in the form of drivers and cleaners along with others plays and important role in the growth of trucking industry. This is again very important because the data given below in the Table 2 indicates that the addition of number of trucks in existing trucking population every year is significantly high.

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Table-2: Domestic Sales Trends of Commercial Vehicles in India

Year	Commercial Vehicles
2012-13	793211
2013-14	632851
2014-15	614948
2015-16	685704
2016-17	714082
2017-18	856453
Source: Society of Indian Automobile Manufacturers (12th January, 2019)	

Again, skilled and trained manpower for trucking industry is very important to achieve economies of scale and optimum utilization of assets through reducing number of accidents on roads, improvement in movement on roads by reducing congestion and traffic jams, proper driving with good mileage, etc. This is required because of the importance of trucking industry to our economy with reference to customer tailored service, easy availability, smaller cargo acceptance, flexibility in operation and organization, door-to-door services, more economical in terms of total cost and time, etc.

Further, given the population and its growth in future only a very small of India's workforce has any skill training in general and road goods transport in particular. Along with some of the sectors of our country's economy faces shortage of skilled people and low productivity levels due to poor quality of work force, the road goods transport (trucking) industry is one of them in major way. Thus, in this context, skill development through training and other required facilities has become a key priority area for the country in general and trucking industry in particular (Parihar, M. 2015).

2. METHODOLOGY

The methodology includes review of literature to gather insights and secondary data use. The study also attempted a critical understanding about the Pradhan Mantri Kaushal Vikas Yojana and trucking industry in India having considered the role played by skilled and trained manpower in performance of the sector through increased productivity in many ways. Again, given the importance of trucking industry in economic growth of our nation, the significance of our study can be considered from a future policy framework perspective. This has been sought to be examined with the help of secondary data and econometric analysis fitting log-log regression model which has provided some basis for the study.

3. OBJECTIVES

- To understand the status of PMKVY and nature of trucking industry in India.
- To examine the role and impact of PMKVY in providing skill and training to drivers in trucking industry.
- To suggest policy guidelines and recommendations on the basis of the study.

4. ANALYSIS OF PMKVY AND TRUCKING INDUSTRY IN INDIA

On one hand the young population of India is the biggest constructive factor for the growth of Indian Economy and on other hand, youth are also very important for development of trucking industry. Again, India in demography the youngest country in the world with the further assumption that between year 2010-2030 about 241 million will be an addition to the working population of the country. Also, it is expected that 25% of the World's workforce will be Indian by 2025 and this scenario may last for the next 25 years until 2050. However, the issue is concerned with training and skill development of additional youth population to make them more efficient, productive and job ready with reference to employment generation.

Therefore, in this connection government approved National Policy on Skill Development on 23rd February 2009 to empower our youth through improved skills, knowledge with recognized qualification to gain access to decent employment and ensure competitiveness. However, the capacity of skill development in the country was 3.1 million only. This capacity was considerably less as compare to the actual requirement. Again, in case of trucking industry, given the lack of proper training and skill development of the stakeholders especially the drivers along with bad condition of roads (in many cases) lead to safety issue, accidents, congestion and traffic jams, high operating coat and high operating time, etc. Thus, the Central Government planned to increase enrollments in vocational education system to about 25% of total secondary enrollments. However, it was observed that even though government is trying to increase enrollment rates in vocational education, which is comparatively small when judged with international comparisons, expanding the number would not be justified unless a model is found that substantially improve outcomes (Parihar, M. 2015).

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Thus, keeping in mind with ever increasing the population, the need for providing skills and training to the young population, Government of India set-up Ministry of Skill Development and Entrepreneurship (MSDE) in 2015 to provide outcome based skill training to its youth through flagship scheme "Pradhan Mantri Kaushal Vikas Yojana (PMKVY)" under institutional arrangement comprising of National Skill Development Corporation (NSDC) with an aim to enable and mobilize large number of Indian Youth to take up skill based training and become employable and earn their livelihood with enhanced productivity. Also, it has been learnt that under the PMKVY Scheme the monetary reward would be provided to trainees who are successfully trained, assessed and certified in the skill and training course run by affiliated training providers or partners. This will boost the productivity of our country's workforce by enabling them to acquire high quality skill training (Scheme Document- PMKVY).

Further, keeping in mind the need of skilling people to meet the requirement level at maximum extend due to shortage of available capacity to skill the people in past, the PMKVY Scheme has been started by Government of India to skill youth with the capacity to provide training with skill development for around one crore youth annually in the coming four years i.e. 2016-2020 with all kind of institutional arrangements with approved modification and continuation of PMKVY with the "Skill Development Component" with an outlay of Rs. 12,000 Crore (The Financial Express 13 July 2016). Moreover, under PMKVY the skill and training activities are carried out through Short-Term Courses and RPL System i.e. Recognition of Prior Learning. Further, the Short-Term Courses are provided through Sector Skill Council (SSC) which is sector specific given the need or requirement of youth and various sectors and sub-sectors of our country.

The Sector Skill Council (almost 39) consists of various sectors and sub-sectors for training and skill development such as Automotive, Agriculture, Apparels made-ups and Home Furnishing, Automotive, Beauty and Wellness, BFSI, Capital Goods, Construction, Domestic Worker, Electronic, Food Industry, Furniture and Fitting, Gems and Jewellery, Handicraft and Carpet, Healthcare, Hydrocarbon, Indian Iron and Steel, Indian Plumbing, Infrastructure Equipment, Instrumentation Automation Surveillance and Communication, IT-ITes, Leather, Life Sciences, Management and Entrepreneurship, Media and Entertainment, Paint and Coating, Power, Retailers, Rubber, Green Jobs, Mining, Persons with Disability, Sports-Physical Education-Fitness and Leisure, Strategic Manufacturing, Telecom Sector, Textile, Tourism and Hospitality. Further, as per the mechanism of PMKVY the training partners being selected or appointed by government to provide sector specific training and skill development to the youth. As of now (i.e. till 5th January, 2019) the details of short-term courses and RPL is given below:

Table-3: Pradhan Mantri Kaushal Vikas Yojana details as on 5th January, 2019

Sr. No.	Particulars	Short-Term Courses	RPL
1	Candidate Enrolled	2485856	1089832
2	Ongoing Training	98192	13002
3	Trained/Oriented	2376429	1040666
4	Assessed	2199888	839587
5	Passed	1970160	763396
6	Total Certified	1961237	732471
7	Total Placed	1014993	N.A.
Source: PMKVY Website 5th January, 2019.			

However, it has been observed that despite of the provisions being made under short-term courses through Sector Skill Council (SSC) i.e. Logistic Sector Skill Council for vehicle drivers, there are no training partners to train them and provide some skills to them specific to their domain, this simply reflects that despite of provisions of training and skill development within Sector Specific Council, nothing has been done for trucking industry with reference to training and skill development of drivers as well as cleaners, since they are the one of the major components of the sector which really makes our economy to moves on the roads and go ahead. Not making such efforts with reference to selecting or finding training partners or providers to provide training and skilled-up the drivers specially, it will be a major set-back for trucking industry. This is because the growth of trucking industry has positive correlation with GDP growth with elasticity is more than one. It can be seen with the help of result obtained from econometric analysis fitting log-log regression model to check the relationship between GDP and Truck Population (2000-2001 to 2013-2014).

The Model is:

$Y_i = \beta_i + \beta_2 X_i + U_i$

Whereas,

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Y_i = Truck population, β_i------$\beta 2$ = parameters to be estimated and X_i = GDP Growth

Thus on the basis of applying the data in given model for estimation to analyze the impact of growth in road network, the hypothesis is constructed i.e. the hypothesis states that there is no significant relation between truck population growth GDP growth. Further, the result shows that the value of R^2 (preparation of variances in the dependent variable that can be explained by the independent variables) is 0.99 which indicates that GDP growth explains 99% of the variability of the truck population. In other words, there is a strong impact of GDP growth on truck population. Thus, the result is statistically significant at 5% level of significance. Therefore, the hypothesis (there is no significant relation between truck population and GDP growth) is rejected. The result is as follows in Table 4.

Table-4: Truck Population Growth

	GDP Growth
Elasticity	1.18
Intercept	-4.10
R^2	0.99
Standard Error	0.013
t-stat	42.80

Source: Our Analysis

Thus, on the basis of given result and no concrete efforts under current scheme of PMKVY for training and skill development of commercial vehicle drivers, it is observed that whatever target being set-up is falling short of actual need looking at growing population and potential of employment generation by all the sectors of our economy in general and road goods transportation i.e. trucking industry in particular.

Further, with reference to trucking industry, truck drivers are the most substantial part of the transportation sector. Not only they do help the logistic industry but certainly a backbone for the country's economy because nearly 70% or more of the cargo is transported along the roads making trucks a very important part of the economy. Today, Indian trucking industry has around more than 90 lakhs vehicles (Trucks of all categories) on the road and need around 7 lakhs or more new truck drivers every year given the addition of new trucks in existing truck population in our economy.

Again, it is being observed that provided no motivation to the stakeholders of trucking industry especially drivers through PMKVY, youth certainly is not interested in taking up a driver's job in the road transport industry as their career due to all the occupational hazards that come along with the occupation, especially concerned with training and skill development. Due to the scarcity of drivers, on the basis of earlier studies it is found that one out of every six vehicles i.e. truck is not moving on roads. Moreover, if we compare total employment generation capacity of trucking which is being increased from 13.15 crore in 2016-17 to estimate around 16.59 crore in 2019-20 (Parihar, M. 2015) and among this given the new addition of truck population to the existing one which would be around 25 lakhs or more during the same period (as mentioned in Table 2) the need for drivers would be only around 30 lakhs or more. However, despite of this scenario there are no provisions or no efforts or no training partners for skills and training to driver under PMKVY which result into major setback to trucking industry as well as our economy in many ways, since no private agency at macro level is undertaking this activity or exercise.

5. CONCLUSION:

The study conclude that PMKVY as a flagship program of MSDE has brought and further also really bringing changes in the economy through its various skill and training development activities under different heads i.e. Sector Skill Councils. However, no concrete efforts being putted for training and skill development of commercial vehicle drivers and other stakeholders of trucking industry despite the fact that it serves as a backbone of our economy. The study also conclude that positive correlation between GDP growth and trucking population, the demand for trucking services also increasing and thus, the number of trucks. Further, this will create demand for more number of drivers and cleaners. However, with no training partners for commercial vehicle driver's training under PMKVY, it is going to cost our economy internally as well as externally by losing competencies in international trade directly and indirectly.

Therefore, the study suggests that government should, on immediate basis, find out training partners for commercial vehicle driver's training and skill development at national, state or district level. Government should motivate and encourage private entrepreneurs or large trucking operators through various incentive programme to come forward and start at their level to provide training and various skill enhancement techniques

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to the drivers through an appropriate execution model between government and training partners. However, it is not as simple as it seems because it involve financial and other obligations too. Thus, in this regard a detailed study is called for.

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ECONOMIC PROSPERITY TOWARDS FISHERIES SECTOR IN TELANGANA

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ABSTRACT
In fisheries sector the concept of Blue Revolution has started to improve the economy of the country. The Blue Revolution main objective is to provide best quality of fish seed for aquaculture and also culture-based, capture fisheries from the available water resources of the country to optimize production and productivity from inland fisheries and aquaculture in the country. The government has been taking the initiatives towards increasing the fish production and productivity in the country, to enhance the exports of fish and fishery products and to provide employment to more than fourteen million persons by extending assistance to various agencies for implementation of activities. So, this sector has become the traditional important sector for the development of economy and sustainability of income and employment generation in the country as well as in the Telangana state. Fisheries sector plays a vital role in Telangana state and its contribution of GVA is 0.6 percent. The resource base of fisheries in the State include 80 reservoirs spreading about 1.89 lakh hectares, 35,031 tanks spreading over an area of 4.01 lakh hectares. The government has taken initiative to sanction the 100 percent free fish seed to the gram panchayats in the state. To develop this sector, it has been implementing the modern tools of research & development including biotechnology for increasing production and productivity from fisheries. The fishing community persons not only mean for fishing activity they are engaged in other activities like processing, preparing nets, preparation of feed for seeds, marketing channels etc. This paper mainly focused on the growth and development of fisheries in Telangana.

Keywords: Fisheries, Blue Revolution, Economy, Aquaculture, Water resources, GVA

1. INTRODUCTION
Fisheries sector is an allied sector of agriculture sector. It plays a vital role in the economic development by providing nutritional and hygienic food to the people and improving the sustainability of income and employment generation in the developed and developing countries. Fisheries sector contributes to 1.1 percent of the GDP and 5.15% of the agricultural GDP. India is the second largest producer in Inland fish production of the world, the more production in India will be exported to other countries, which will be received more revenue from other countries in the form of foreign exchange earnings.

Table-1: Economic position of India in Fisheries Sector

1.	India's position at the global level	Third in fisheries and Second in aquaculture
2.	Contribution of fisheries to GDP (%)	1.1
3.	Contribution to Agricultural GDP (%)	5.15
4.	Per capita fish availability (kg)	9.0
5.	Annual export earnings (Rs. in crores)	33,441.61
6.	Employment in sector (million)	14.00

Source: nfdb.gov.in

In this regard most of the people who are working in different activities of fisheries sector are nearly 14.48 million people. They will be employed in different activities like food processing industries catering to the global demand, marketing channels, storage facilities, harvesting of water resources etc to increase the export contribution.

1.1 REVIEW OF LITERATURE
1. Aswathy N. & Shyam S.Salim (2012), "Subsidies in Indian fisheries –Methodological issues and implications for the future" studied that there is an urgent need to regulate fisheries subsidies due to the negative impact that subsidies have on trade, environment and sustainable development.

2. Santhosh Kumar Raghav, P.K.Goel, KMuzammil and H.Gupta (2013) in article "study of analysis of fisheries statistics in India" studied that fish production in India has increased more than tenfold since its independence in 1947.

3. Narasimha Ramulu.K & Benarjee.G (2015), "Fish production trends in certain Reservoirs- A study in the North Telangana districts of Telangana state", studied that to increase fish production there has been an increase of pressure on these water bodies that leads to ecological imbalance.

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4. Fisheries sector is one of the fast growing sectors contributing to GSDP of the State as well as generating income and employment. Fisheries sector contributes 3.47 percent of GSDP from agriculture and 0.6 percent to the GSDP during 2014-15 at current prices.
5. "Fisheries fast growing sector in Bangaru Telangana", in this article fisheries sector aims at exploitation of all the possible resources under capture and culture fishery base for increasing fish production and productivity through sustainable development.

1.2 OBJECTIVES OF THE STUDY

- To know about the Indian fisheries sector
- To study the growth and development of fisheries in Telangana.

2. FISHERIES IN INDIA

A fishery sector is one of the major sector in India. It contributes an important role in the economic development by providing a channel of livelihood to the rural areas. The people who are in the fishing occupation have to know the technology of fishing to improve their production.

This sector mostly depends on the season as well as water resources. The water resources in India are consisting of reservoirs, major, irrigation long and short seasonal tanks, ponds, estuaries brackish water sources.

Table-2: Status of various water resources in India for fish production

S.No.	Type of Reservoirs	No. of Reservoirs	% of the total Reservoirs	Total area in Ha	% of the total area
1	Small	19134	98.78	1485557	47.11
2	Medium	180	0.93	527541	16.73
3	Large	56	0.29	1140268	36.16
	Total	19370	100.00	3153366	100.00

Source: Planning commission (2012): 12th Five year plan (2012-2017) Report of the working group on Development and Management of Fisheries and Aquaculture.

From the above table it shows the various water resources in India for fish production. There are three types of reservoirs small, medium and large. The number of small reservoirs are more in India rather than medium and large are 19134 (98.78 percent) with the area of 14, 85,557 hectares (47.11 percent). Medium size reservoirs are 180 (0.93 percent) with the area of 5, 27,541 hectares. Large size reservoirs are 56 (0.29 percent) with the area of 11, 40,268 hectares (36.16 percent). The area of large size reservoirs are more than medium size.

Table-3: Species of fish in India

Water Resource	No. of species of fish	Type of fish
Marine	1906	Tilapia, Salmon, Capelin
Fresh water	1016	Rohu, Catla, Mrigal
Brackish water	113	White leg shrimp
Total	3035	

Source: DAHD

Fishes are from natural resources, it is always better than other food. It is very hygienic and protein food to the consumers. Fish products are used directly or indirectly for human consumption. Direct consumption of fish will be cooked. Indirect consumption of fish has to be used for medicinal way i.e. omega3. The marine fish products are 1906 types like tilapia, salmon, capelin etc. Fresh water fish species are 1016 models like rohu, catla, barbus, carpus and mrigal etc. Brackish water fishes are 113 like white leg shrimps and these are very popular in India. Total species of fishes available in India are over 3000.

3. FISHERIES IN TELANGANA STATE

In Telangana state fisheries sector is one of the fast growing sectors by generating income and employment. It is contributing about 2.8 per cent in gross value added of agriculture and allied sectors during 2017-18. It plays an important role in the overall socio-economic development of fishermen community by providing nutrition and hygienic food and livelihood security. This state is ranked 3rd in terms of inland fishery resources after Karnataka and Tamilnadu and ranked 7th in terms of fish production. The government is taking initiatives to develop the fishery sector by providing backward and forward linkages to increase the fish production and productivity and sustain the livelihoods of fishermen. And also taking the initiatives to get the fish to all the consumers at an affordable price and maintaining hygienic condition of fish by improving the marketing

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infrastructure and distribution channels. Every year the government is providing free of cost fish seed to improve the productivity by utilizing the water resources available in the state.

Table-4: Status of various water resources in Telangana for fish production

S. No.	Type of Reservoirs	No. of Reservoirs	% of the total Reservoirs	Total area in Ha	% of the total area
1	Small	55	68.75	21671	11.42
2	Medium	17	21.25	28090	14.80
3	Large	8	10.00	140074	73.78
	Total	80	100.00	189835	100.00

Source: Telangana.gov.in: socio-economic outlook-2017

Telangana state is blessed with important ample of water and irrigation projects like sriram sagar project (Nizamabad), Singur dam (medak), Nizam sagar (Nizamabad), Yellampally project, Lower Manair dam, Mid Manair, Upper Manair dam (Karimnagar), Kadam reservoir, Sir komuram bheem project (Adilabad) etc numerous water bodies. Growing visibility of fisheries sector due to enhanced water resources on construction and completion of irrigation projects is expected to lay a strong foundation for aquaculture in the canal fed areas besides emerging as an attractive investment option and a lucrative business activity. The state has vast and diverse resources in the form of tanks and ponds (both seasonal and perennial), reservoirs, rivers and canals.

Table-5: Fish production of Telangana in India during the period 2006-17 (million tons)

Year	India		Telangana		% age of Telangana in India
	Qty	% of Qty	Qty	% of Qty	
2006-07	6.87	7.06	0.091	2.46	1.32
2007-08	7.12	7.32	0.12	3.24	1.69
2008-09	7.60	7.81	0.15	4.05	1.97
2009-10	7.85	8.07	0.13	3.51	1.66
2010-11	8.23	8.46	0.13	3.51	1.57
2011-12	8.66	8.90	0.20	5.40	2.30
2012-13	9.04	9.29	0.21	5.67	2.32
2013-14	9.57	9.83	0.24	6.48	2.50
2014-15	10.16	10.44	0.26	7.02	2.56
2015-16	10.79	11.09	0.23	6.21	2.13
2016-17	11.41	11.73	1.94	52.42	17.00
Total	97.3	100.00	3.701	100.00	37.02

Source: Annual Reports and compiled by author

From the above table it shows the fish production of Telangana in India during the period 2006-2017. In 2006-07 the production was 6.87 million tons with the 7.06 percent and in Telangana state the production was 90,606 million ton with the 2.46 percent. It clearly says that 1.32 percent of fish production from Telangana state in India. The production was increasing since last decade from 6.87 million tons to 11.41 million tons with the 7.06 percent to 11.73 percent. In Telangana state the production was increased from 0.091 million tons to 1.94 million tons with the percent of 2.46 to 52.42. The percentage of Telangana fish production in India during this decade was increased from 1.32 percent to 17 percent. With initiative of government schemes and fishermen community cooperation the production was increasing year by year.

4. CONCLUSION

Recently the government has concentrated on this fishery sector to develop the growth of this sector. Even though it has been associated with the poor, illiterate with rural background, the revenue is earning from this weaker sections of the society only. It plays a vital role in contributing the livelihoods of the marginalized sections of population, and it also provides nutritional security to millions of people and extending the foreign exchange earnings with export income and government revenue. The government is taking initiatives to flourish this sector with different schemes and plans to make it as bangaru Telangana.

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THE EMERGING ROLE ICT INFRASTRUCTURE IN ECONOMIC DEVELOPMENT: CURRENT STATUS AND POLICY INITIATIVES OF GOI

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ABSTRACT
In today's information age, the role of information and communication technology (ICT) has been well recognized in the development process. Technology diffusion has connected the global market where information has become an asset. The major aspect of ICT includes efficient communication based network society, a step toward the creation of civil society. It also promotes the increasing access to the opportunities and thereby targets the issue of poverty at large. The developed countries are enjoying the fruit of ICT development in the global market whereas developing countries are lagging behind on the expected rate of technology diffusion. The notion of digital divide focuses on those countries who have access to the ICT tools and services and others who do not have access for the same. India as a developing country is no longer exception to this scenario. The major determinant that is accountable for widening the digital divide is a non-availability of ICT infrastructure. Hence, it becomes necessary to understand the various factors that constitute the term ICT infrastructure development. The present study seeks to identify the emerging role of The ICT infrastructure in Indian context and its implications on economic development. It also seeks to present the current status of ICT Infrastructure in India and Policy Initiatives of GOI.

Keywords: Infrastructure, ICT, ICT Infrastructure, digital divide, regional disparity

1. INTRODUCTION

The well-functioning of any economic system depends on efficient and smooth interaction of economic agents. The indicator of gross national product (GNP) is being used as tool to measure this development. However, the economic growth in the form of gross national product (GNP) does not imply the social development as well. Hence, The World Bank (2011) has replace GNP with gross national income (GNI) due to its non-linearity or consistency with the wellbeing and welfare of the society. This has opened up the further discussion in the realm of understanding development phenomena. In development literature, several studies have considered various determinants of economic development other than GNP; includes the per capita income, employment, health, education, infrastructure development etc. The infrastructure development is foundational contributor which entangles most of these parameters of economic development. The infrastructure development has positive impact on economic performance, employment, output etc. and thereby it helps to achieve the goals of social development.

The technology intervention is supplementary in the process of achieving these goals. Its catalytic role has been well recognized in the paradigm of development. The technology diffusion increases the competitiveness of the industrial sector. The ICT revolution has brought revolutionary change in the business processes and product. The social development is also experiencing the way towards the new transform society. The access to the information is the key in the development process for the equitable distribution of opportunities with reference to health, education, standard of living etc. The ICT also plays important role in the development of human capital. In this context, the ICT infrastructure has become a necessity to tap the real potential of ICT in economic development. The ICT infrastructure is different from other physical infrastructure due to its network externality feature. The network externality deals with concept where the value of the product increases with the increase in the number of consumers. The ICT infrastructure also produces the similar type of effects that are produced by the other physical infrastructure. The e-commerce businesses, social networking sites are the technology driven industries who are dominating the world and the economy as well. On the social development front, it plays major role for creating network society. The ICT infrastructure is the key element in has mobilizing factors of production and for increasing efficiency of resources optimally. The developing country like India is leading as emerging economy in the global market. To become a global leader, it need to strike the technological growth. Technology driven economic growth has become necessity in today information age. It becomes crucial to understand the role of ICT infrastructure in economic development. Thus, the present study seeks to provide theoretical underpinning in understanding the emerging role and need of ICT infrastructure in economic development. It also presents the current status of ICT Infrastructure in India and Policy Initiatives of GOI with respect to telecommunication policies. It seeks to provide theoretical underpinning in understanding of ICT infrastructure with respect to empirical studies in the Indian context.

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OBJECTIVES OF THE STUDY

- To understand the linkages between infrastructure development in economic development
- To identify the emerging need and role of ICT Infrastructure in Economic Development
- To present the current status of ICT Infrastructure in India and Policy Initiatives of GOI with respect to telecommunication policies.

2. LITERATURE REVIEW: INFRASTRUCTURE DEVELOPMENT AND ECONOMIC DEVELOPMENT

The term infrastructure connotes the concept of facilitating all the basic services and facilities for the functioning of society. It encompasses two elements namely the physical infrastructure and the social infrastructure. The physical infrastructure consists of construction of roads, power houses, waterways, airways, sewage services etc. whereas social overhead capital deals with building of schools, hospitals etc. The economic and social transactions and their interactions are completely dependent on proper infrastructure services. Without having proper infrastructure, the consumer and producer cannot transact optimally in any economic system. The role of infrastructure development is crucial as it increases productivity by optimizing the efficiency of factors of production. Secondly it also generates employment which leads to increase cash flow in the economy. Thirdly, it influences the transaction cost as important component in price determination. The decision on what to produce also depends on easy availability of inputs; hence transportation cost comes into picture. Empirically, several studies have pointed out the positive impact of infrastructure on economic growth and development (Rao & Srinivasu, 2013; World Development Report, 1994). Better infrastructural services and facilities also determine the standard of life. Thus it shows positive impact on economic growth directly and indirectly.

Additionally, the rigorous research work has been done on the understanding the impact of infrastructure development on productivity; includes the major work of Aschauer (1989a) and Munnel (1990a). These studies highlights that the investment in the public capital produces direct and indirect benefits. The direct benefits involve the increase in productivity, reduction in transaction cost and importantly high level of economic growth. The indirect benefit includes increase in employment and its other externality effects by increasing connectivity with economc and social agents. A study by Munnel (1990a) also point out the positive impact of highway and water and sewer system on development. It concludes that 1% increase in public capital gives rise in output by 0.15% at state level. In short, the infrastructure development is an important determinant of economic growth and thereby on economic development.

The study by Seers (1979) highlights the need to consider other parameters like poverty, inequality and unemployment as an element of quality of life along with income per capita. The World Bank, 2016 has set the various development indicators with reference to the sustainable Development Goals; includes quality education, no poverty, Good health and well-being, Gender equality, Clean water and sanitation, Affordable and clean energy, Productive employment and economic growth, Industry, innovation, and infrastructure, Reduced inequalities, Sustainable cities and communities, Climate action, Peace, justice, and strong institutions and Partnership for global development. In this line, it is important to study various components that influence these indicators. The human development index (HDI) is being used as parameter to determine development.

The developed countries are moving ahead on these fronts whereas the developing country like is lagging behind. Recently, India has been ranked 130th position in HDI index (UNDP, 2018). However, it is emerging as a leading economy in the global market. It's an alarming sign for the Indian economy to improve the scale of its identity on the parameters of human development index by adopting strategic policies.

The following figure 1 gives the overview of Indian economy on the basis of GDP growth, and HDI trend in comparison with BRICS countries.

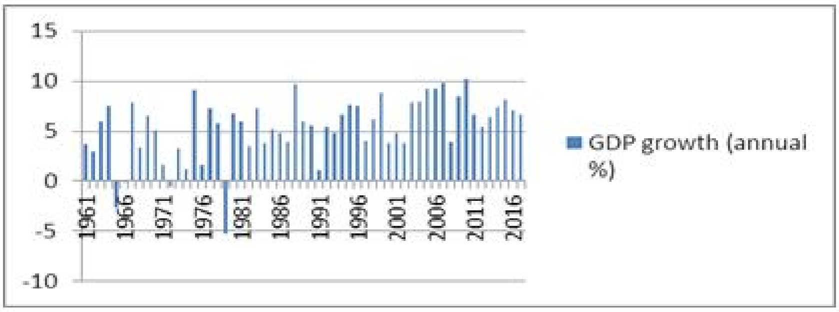

Figure-1: GDP growth (annual %) (Source: World Development Indicators, 2018)

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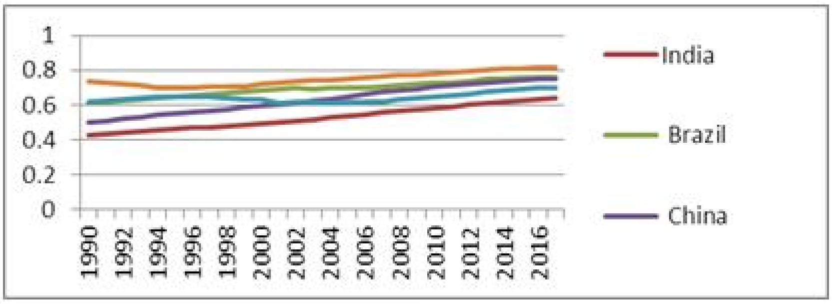

Figure-2: Human Development index trend (1990-2017) (Source: United Nations Development Programme, 2018)

3. THE EMERGING ROLE AND NEED OF ICT INFRASTRUCTURE IN ECONOMIC DEVELOPMENT

In the era of globalization, the changing demand of global market and its competition has led the need of ICT infrastructure. The technology intervention is not influencing economic processes but also influences the social interactions. The information has become an asset in the development process. It increases scope of access to the opportunities. The technology diffusion and ICT infrastructure are closely related to each other. The ICT has created the platform for the creation of civil society in which everyone will be well informed about whereabouts of the economy. The access to the increase in opportunities through information dissemination and poverty are closely related linked with each other. A study by Patra & Acharya (2011) indicates the inverse relationship between poverty and infrastructure development index. The study employs the data of 16 states of India during the period of 2002-03; aims at understanding the impact of Infrastructure Development on Per Capita Net State Domestic Product.

Initially the major thrust has been majorly on the traditional type of infrastructure which has taken turn to by incorporating the merging need of ICT infrastructure. The role of ICT infrastructure is important in the production process with respect to information dissemination. The ICT infrastructure determines the rate of technology diffusion. The many management thinkers and scholars have highlighted the important efficient and transparent communication cycle. It becomes possible with effective ICT infrastructure. Hence, it becomes important to understand the meaning and determinants of ICT infrastructure. Baquero et al., (1999) defines ICT infrastructure as “set of hardware, software, services, procedures, processes”. The ICT infrastructure is different from other type of infrastructure due to its characteristic of network externality. The network externality is nothing but the value derives by the consumer increases with the increase in number of consumers. The indicators in the ICT infrastructure are broadband infrastructure, fixed telephone subscription, mobile subscription, and internet users.

4. CURRENT STATUS OF ICT INFRASTRUCTURE IN INDIA AND POLICY INITIATIVES OF GOI

The role of ICT is no longer seen from the perspective of its economic implications but also from the perspective of its implication on political regime. The ICT products and services are being used at macro level for managing society at large. Recently launched the digital India campaign is the product of e-governance system. It’s nothing but the transformation towards the real means of managing economy by bringing e-platform that characterizes transparent and smooth transfer of governmental services to the society. It also aims to promote the accountability among the stakeholders; helps the government to present the factual and real situation. The Indian government has undertaken various other projects as well. But the success of these programs are mainly depends on how well the information reaches to the ultimate stakeholder.

Additionally, India needs much more technological adoption as it is emerging as one of the leading economy in the global market. It’s not possible for developing countries to follow the path of developed countries until it entangle themselves into technological adoption and upgradation. The developing countries are not able to tap its full potential without having proper ICT infrastructure. Hence, the current section reviews the government initiatives pertaining to the development of ICT infrastructure.

In the Year 1989, the GOI has set up the Telecom Commission for formulating various policies related to telecommunication. First policy was drafted in the year 1994, had set the target to provide telephone on demand and also setting up of 1 PCO for every 500 people in urban areas by 1997 (DoT). The policy draws attention to the need of heavy funding to meet the growing demand in the VII five-year plan i.e. approximately 23000 crores highlighted the need of private funding to complement public funding. The Re-licensing was also done to equipped manufacturing of telecom equipment. The involvement of private sector was incorporated in the area of basic telephone services also which was earlier dominated by the public sector majorly. The second New Telecom Policy, 1999 identified the ICT infrastructure as foundation for the growth Information Technology industry. It highlights the achievements of earlier targets of setting up of 1 PCO for every 522 people in urban areas within the expected time. The policy also reasserted the need of active involvement of the private sector to bridge the resource gap; took private sector participation in a phased manner. It also identified the role of telecommunications in social and economic growth, provision of universal service to all uncovered areas, including the rural areas. The policy set up the target to provide telephone on demand by 2002 which was not achieved as targeted by 1994 policy. Other targets include the expansion of telecom coverage to the rural areas, Providing Internet access to all district headquarters by 2000 and to develop adequate bandwidth of 10 GB on national routes. The broadband policy 2004 realizes the impact of broadband services on economic growth. The growth of broadband penetration produced multiple positive effects that include the employment generation by channelizing the information, e-governance, tele-education, tele-medicine and many more. The policy estimated the growth of **Internet Subscribers to** 6 million by the end of 2005 and 40 million by the end of 2010. It also estimated growth of **Broadband Subscribers to** 20 million by the end of year 2010. The National telecom policy, 2012 recognizes the role of The New Telecom Policy, 1999 toward the growth of telecom sector and human capital formation to enhance the pace. This policy targeted rural tele-density to 100 by the year 2020 & affordable high speed quality broadband connections on demand by 2015. The recent National Digital Communications Policy, 2018 mainly aims to achieve strategic objectives by 2022; includes the provision of broadband for all, employment generation of 4 Million through the growth of digital communication sector, and digital Sovereignty. To fulfill these objectives, the policy undertakes three missions namely Connect India (construction of robust Digital Communications Infrastructure), Propel India (Investments, Innovation and IPR generation) and Secure India (Sovereignty, Safety and Security of Digital Communications). These policies provide critical orientation of political economy to the growth of ICT infrastructure. Hence, it becomes important to increase the investment in ICT infrastructure in India. It is quite evident that it requires huge capital investment which is difficult due constraint of budget deficiency.

4.1 The ICT infrastructure in India and Regional Disparity: Current Status and analysis

The notion of digital divide focuses on two aspects i.e. those who have access to the ICT and those who do not have access to the same. It has been observed that there is widening gap of digital disparity among developed and developing countries. India is not an exception to this. The following section presents the current status of ICT infrastructure in Indian context. The figure 3 represents the structure of various ICT infrastructure indicators for the period of 2001 to 2017.

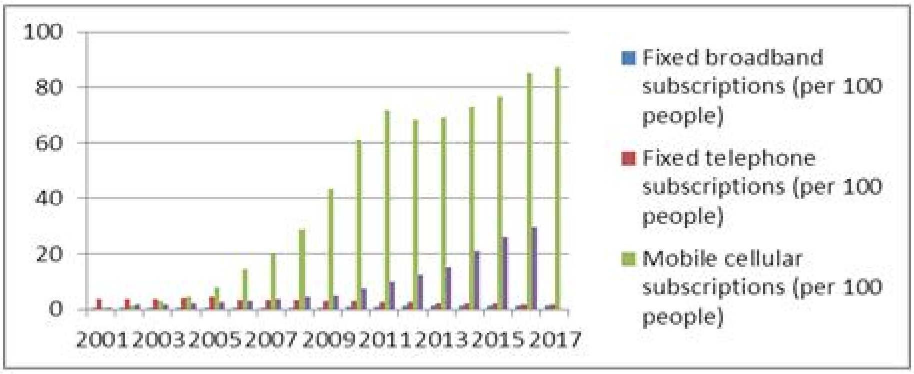

Figure-3: ICT infrastructure in India **(**Source: World Development Indicators, 2018)

Several studies have studied these indicators with respect to its implication on development. The empirical data shows the growing penetration of mobile cellular subscription over the fixed telephone subscription. It is quite indicative that the mobile phones have replaced the fixed telephone lines. The study by waverman (2005) supplements these results. It points out the increased role of mobile phones in less developed economies. It is because of the price of mobile phones over the cost on fixed telephone lines, as well as physical viability to reach to end users at low cost affordability.

The data in the figure 3 also indicate the rapid growth of internet penetration. The internet has revolutionized the pace of ICT diffusion. The use of Internet is like individuals connecting the dots on the surfaces by sitting at different corners of the world and noticing their interaction. The expansion of e-commerce market, online businesses, etc. is the implication of internet usage. The social networking sites are creating the virtual communities.

The study conducted by Mckinsey (2011) shows the impact of internet on economic growth, employs the data of 13 countries for the period of 1995 to 2009. These countries have shown the high broadband penetration in the last decade which accounts more than 70 % of world GDP. It provides empirical finding in the favor of broadband penetration and economic growth.

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ICT Indicators	Fixed-telephone subscriptions	Mobile-cellular telephone subscriptions	Fixed broadband subscriptions	Individuals using the Internet
Africa	0.9	74.4	0.6	22.1
Arab States	7.9	101.9	4.9	48.7
Asia & Pacific	9.5	104.0	12.6	44.3
CIS	19.8	138.3	17.8	68.6
Europe	35.8	120.4	30.3	77.2
The Americas	23.9	111.8	19.9	67.5

Table-1: Region wise ICT indicators as on 2017 (Source: ITU World Telecommunication/ICT Indicators database, 2018)

The table 1 shows the region wise ICT infrastructure penetration. The digital disparity is evident between two groups namely the group consist of Europe, America, CIS and others. However, the Asian countries are in the mid-way. The reason could be the emergence of these countries as leading fastest growing economies and the spillover effect of developed countries. It concludes the need of ICT infrastructure as a desirable condition to bridge the gap of digital divide and to sustain their economic growth in the long run.

SUMMARY AND CONCLUSION

The developed countries are advancing on the path of economic development by incorporating various ICT tools and services. The link between ICT and development is well recognized. The ICT produces various impacts on the economy that includes increase in productivity, knowledge generation, market efficiency, network society and so on. The technology interventions in the business and society have created huge demand for ICT infrastructure. Hence, the study provides theoretical background to understand the role of ICT infrastructure and economic development. It also aims to provide critical review of government initiatives to promote the development of ICT infrastructure in India. It has been observed that the lack of resource is the major drawback in realizing the potential of ICT diffusion. The investment through Public private partnership programme is not moving ahead with expected rate. The policies of GOI stress the need of active participation of private sector investment. It has been observed that the private entities are reluctant to invest in the infrastructure due to its of nature lumpy investment requirement and long term time period. The ICT infrastructure is no longer exception to this scenario, but on the positive note it is important to understand that it produces multiple benefits in the long run. The goal of social development, the creation of network society is possible by building ICT infrastructure. Conclusively, the many policy initiatives have been undertaken the different heading but the problems are many more. The coordinated efforts of all the stakeholders for funding, the regulatory reforms, and strong political activism are needed to achieve the goal of digital India in true sense.

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APPRAISAL OF MSMES IN INDIA

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ABSTRACT
India has become the 6th largest economy in the world this year, has jumped to the 77th rank in the EODB rankings from 130th last year and is already recognized as the fastest growing emerging economy globally. Despite these accomplishments, she is still not able to make a mark on the industrial development front. So, where does the growth potential of India actually lie? It can be nowhere else but in the MSME sector with its large employment generation potential by using relatively lesser capital and its ability to cater to both rural and urban India. One prime agenda of our development programme along with inclusive growth is women empowerment through their participation in the workforce. This can be best attained by promoting the MSMEs. Another advantage is they serve as ancillary units for large scale Industries. Many initiatives to strengthen MSMEs have been undertaken by Governments in the past as well as by the incumbent central Government. However, are all these initiatives and schemes reaping their fruit as is expected of them? The sector has been confronted with several challenges. Can these issues be addressed effectively? Chances seem to be bright since some Government schemes are making headway and few more are in the pipeline for the benefit and promotion of MSMEs. In this paper, we will throw light on the present status of MSMEs and will critically evaluate their performance. We will discuss some important Government initiatives to conclude that the existence and growth of MSMEs is critical for India's economy.

Keywords: MSMEs, Government initiatives, Mudra, SIDBI, turnover oriented definition, Demonetization

OBJECTIVES OF THE PAPER
1. To discuss importance and role of MSMEs in the Indian context
2. To critically evaluate performance of MSMEs over the years
3. To throw light on challenges faced by MSMEs
4. To highlight key Government initiatives to help improve their productive efficiency
5. To emphasize inevitability of MSMEs in India

RESEARCH METHODOLOGY
The paper is based on secondary data retrieved from URL. It largely makes use of facts and figures from the official websites of Government of India and Ministry of MSMEs. An E book is also referred to.

1. INTRODUCTION
In a labour surplus and capital deficient country like ours, Micro, Small and Medium Enterprises (MSMEs) are of great significance. That they play a pivotal role as the growth engine of Indian economy is a fact well acknowledged by all of us. By virtue of being the second largest employment generator next only to agriculture, the sector is looked upon as a key to inclusive growth. Catering to both rural and urban areas, serving as ancillary units to large industries and creating a framework conducive to participation of women in the workforce are some of the major advantages of MSMEs in India.

2. ROLE OF MSMEs IN INDIAN CONTEXT
The role and importance of MSMEs in socio-economic development of India can hardly be overlooked. MSMEs contribute 31% of Indian GDP (25% from services and 6% from manufacturing), 40% of exports and employ 40% of the total workforce. They have maintained an average growth rate of 10%. These statistics indicate that MSMEs are indeed the backbone of Indian economy. They constitute a vibrant and dynamic sector fostering the entrepreneurial initiative. The MSMEs are widening their domain across all sectors of the economy today to meet domestic as well as global demand.

3. CLASSIFICATION OF MSMEs

Classification of MSMEs	New classification (Annual Turnover) Rs	Previous classification Investment plant & Machinery (Manufacturing) Rs	Previous classification Investment Equipment (Services) Rs
Micro	Not more than 5 crore	Not more than 25 lakhs	Not more than 10 lakh
Small	Between 5 & 75 crore	Between 25 lakh & 5 crore	10 lakh to 2 crore
Medium	75 to 250 crore	5 to 10 crore	2 to 5 crore

Table-1: Source: Section 7 of MSMED Act

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The New classification based on turnover of firms was suggested by MSME minister Mr. Giriraj Singh and was approved by the parliament in February 2018. This new definition is likely to promote EODB and will make operation of GST smoother unlike the previous criterion where it was possible, by showing less investment to fall in the ambit of MSMEs, to unduly grab concessions granted to them and also evade taxes.

4. PERFORMANCE EVALUATION OF INDIAN MSMEs

Today there are about 633 lakh MSMEs in India. However almost 96% of them are unregistered and exist in the informal sector. The need of the hour is to bring majority of them under the umbrella of the formal economy, thereby granting them the needed protection and opportunity to avail credit from the formal sector. Let us have a look at some vital statistics related to performance of Indian MSME sector as follows:

4.1 - Annual growth of MSME: The table below manifests growth in the number of MSMEs and growth in employment generation over the years.

(Figures in lakh)

Parameter	NSS 73rd Round", 2015-16	Fourth All India Census of MSMEs-2006-07	Annual Compound Growth Rate (%)
No. of MSMEs (Total)	633.88	361.76	6.43
Manufacturing	196.65	115.00	6.14
Services	437.23	246.76	6.56
Employment (Total)	1109.89	805.24	3.63
Manufacturing	360.42	320.03	1.33
Services	749.47	485.21	4.95

Table-2: Source: Annual report, M/o MSME, 2017-18 (Service includes Trade, Electricity & other services)

4.2 - Contribution of MSMEs in the Country's Economy at current prices: The share of MSMEs in Indian GDP is constantly on rise.

(Figures in crore adjusted for FISIM at current prices)

Year	MSME GVA	Growth (%)	Total GVA	Share of MSME in GVA (%)	Total GDP	Share of MSME in GDP (%)
2011-12	2583263	-	8106946	31.86	8736329	29.57
2012-13	2977623	15.27	9202692	32.36	9944013	29.94
2013-14	3343009	12.27	10363153	32.26	11233522	29.76
2014-15	3658196	9.43	11481794	31.86	12445128	29.39
2015-16	3936788	7.62	12458642	31.60	13682035	28.77

Table-3: Source: Central Statistics Office, M/o Statistics & Program Implementation

4.3 - Export Trends of MSMEs: which show MSMEs sizably contribute to Indian exports and the graph is moving upwards by the year.

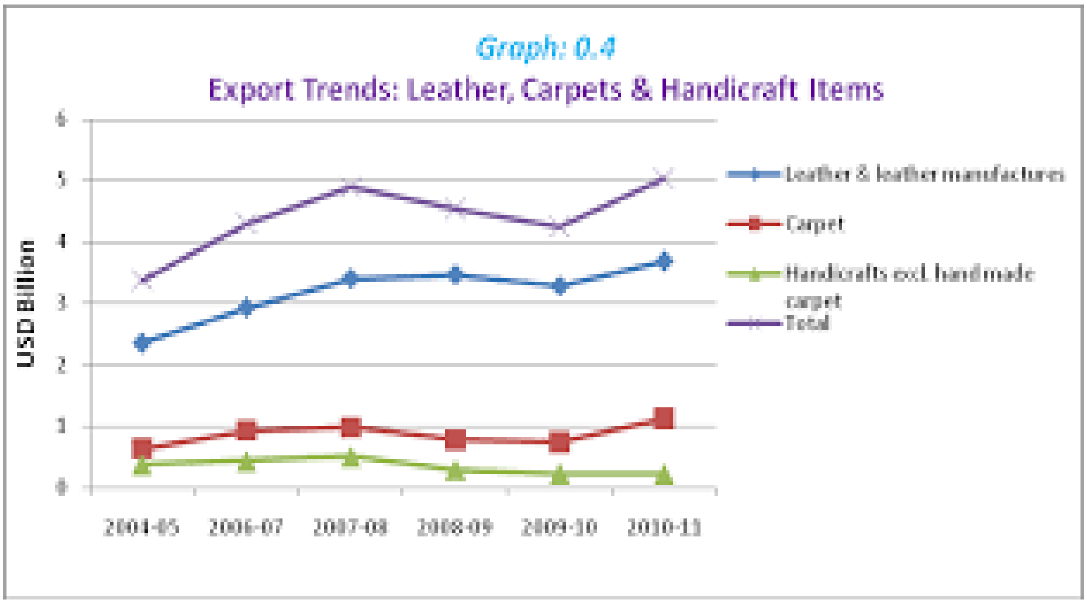

Figure-1: Source: planning commission.gov.in

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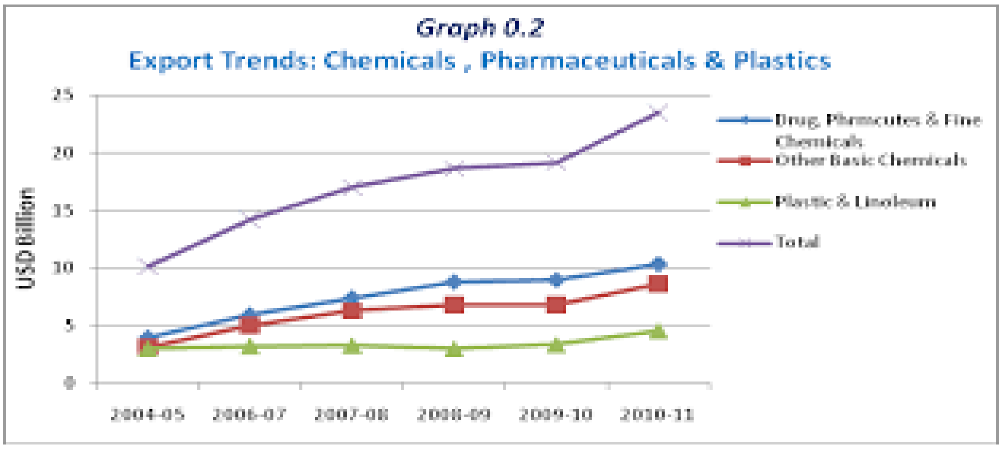

Figure-2: Source: planning commission.gov.in

5. CHALLENGES FACED BY THE MSME SECTOR IN INDIA

However, the flip side of the performance evaluation is difficulties and problems confronting this sector. The story of small businesses in India is characterized by a paradox namely large scale employment with least job security. Let us discuss the challenges faced by this sector:

1. Problem of raw materials- Scarcity of raw materials, low quality and higher costs are three dimensions to this issue. Very often small units have to make open market purchases at heavy costs reducing their competitiveness vis- a-vis large rivals.
2. Finance hurdles – Scarcity of capital in general and weak credit worthiness of small enterprises in particular make it difficult for them to avail capital in required quantity. Inability to offer collateral stands in the way of borrowing from commercial banks and other financial institutions. Hence, they are left with no option but to borrow from moneylenders who exploit them with exorbitant interest rates. The central government in India is making all possible efforts to improve institutional credit flow to this sector through various measures which are yet to achieve any significant success.
3. Marketing problems – In most cases, there exists no definite marketing platform whereby MSMEs can sell their products. As a result, they face an unfair competition from large industries, which puts the MSMEs at a huge competitive disadvantage. The STC and NSIB are looking into this matter and helping small industries obtain Government orders for their products and locate export markets for them.
4. Under utilization of capacity – A study shows that there is gross under utilization of the installed capacity in many such units due to power supply problem. Less than 50% capacity is utilized in many mechanical engineering units, leather producing units, plastic industry and automobile ancillary units.
5. Other problems – Technological backwardness, non-availability of sustainable technology, lack of modernization and expansion constraints, dearth of skilled labour at affordable wages, lack of follow up with Government agencies to resolve problems due to absence of knowledge and manpower.
6. Demonetization – It hit the sector hard as most of such units operate in cash based economy and when bulk of currency was abruptly withdrawn from circulation, it collapsed.
7. Informal sector – Employing casual labour or family members not having the skills to deliver required results leads to lower quality and hampersthe overall efficiency of an MSME.

6. GOVERNMENT SCHEMES & INITIATIVES TO SUPPORT THE MSME SECTOR IN INDIA

In order to help MSMEs overcome the above mentioned challenges, Government has been undertaking relief measures as follows:

1. Protection Measures – They aim at protecting the small units from competition of large industries.
2. Promotional Measures – They wish to promote the functioning of MSMEs. They are measures such as procurement of their goods and services, provision of grants to them, subsidies etc.
3. Institutional Measures – They basically relate to provision of easy institutional credit to this sector as well as furnishing important guidelines etc.
4. CGTSME (Credit Guarantee fund Trust for Small and Medium enterprises) scheme – This is aimed at benefiting small enterprises through increasing loan amount cap as well as the guarantee cover.

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5. Supply of machinery on hire purchase terms.
6. Assistance for domestic marketing and exports.
7. Special incentives to set up new units in backward regions.
8. Allocation of capital to MSMEs as explained by the table below:

Plan Allocation & Expenditure during 2014-15, 2015-16, 2016-17 & 2017-18 (Rs. crore)

Items	2014-15	2015-16	2016-17	2017-18
A. SME Division				
BE	227.00	129.28	310.99	121.00
RE	200.00	143.82	160.73	-
Expenditure	192.42	131.11	121.50	71.01*
B. ARI Division				
BE	2042.00	1651.22	1825.00	2065.28
RE	1500.00	1744.18	1717.54	-
Expenditure	1427.08	1655.03	1686.39	1781.94*
C. O/o DC (MSME)				
BE	1058.00	832.01	864.00	4295.68
RE	800.00	732.00	3107.93	-
Expenditure	771.69	661.42	1365.12	3531.91*
Total BE	3327.00	2612.51	2999.99	6481.96
Total RE	2500.00	2620.00	4986.20	-
Total Expenditure	2391.19	2447.56	3173.01	5384.86*

*[Upto 31.12.2017]

Table 4 – Source: Annual Report, M /o MSMEs 2017-18

7. SPECIALSCHEMES BY CURRENT GOVERNMENT TO REJUVENATE MSME SECTOR IN INDIA

1. Re -implementation of public procurement policy.
2. MUDRA loans – provision of Rs 3 trillion for 2018-19 with a motto “funding the unfunded”.
3. Credit Guarantee Scheme for Micro & Small Enterprises & extending credit limit to Rs. 200 lakhs per borrowing unit.
4. Make in India- Schemes like soft loan fund which are part of ‘Make in India’ programme help many MSMEs to fulfill their requirement of debt-equity ratio for their establishment as well as growth of the existing units.
5. Startup India- Schemes like Livelihood Business Incubators (LBI) & Technology Business Innovation Model (TBI) provide financial support for promoting entrepreneurship as well as innovative startups in the agro-industry.
6. Skill India- Skill development is considered as a prime aim by the Ministry. Various steps are taken in this regard such as improving training capabilities of the Tool Rooms, MSME Development Institutes & other organizations. The scope of training programmes ranges from grass-root level programmes meant for traditional & rural industries to high-end, high tech programmes on CNC machines & other technologies.
7. Union of e-commerce with m-commerce to improve operational efficiency through quicker settlement of business obligations.
8. A new portal to fast track loans for MSMEs in just 59 minutes upto Rs 1 crore announced by Mr. Jaitley in September 2018. It’s a portal by SIDBI which will help in disbursement of loans to those businesses who submit GST and IT details.
9. Cut in Corporate tax to 25% for enterprises with a turnover from Rs 50 crores to Rs 250 crores so that they can reinvest the saved amount for expansion or R & D purposes. This will be a great help to them.
10. Promotion of innovation through interest subsidy.
11. As per the 6^{th} Economic Census 2013, results of which were published on 31st March 2016, the following figure shows sources of Finance for MSMEs. Thus, by increasing the share of finance to the MSME, Government is giving a boost to a number of MSMEs which were deprived of adequate finance

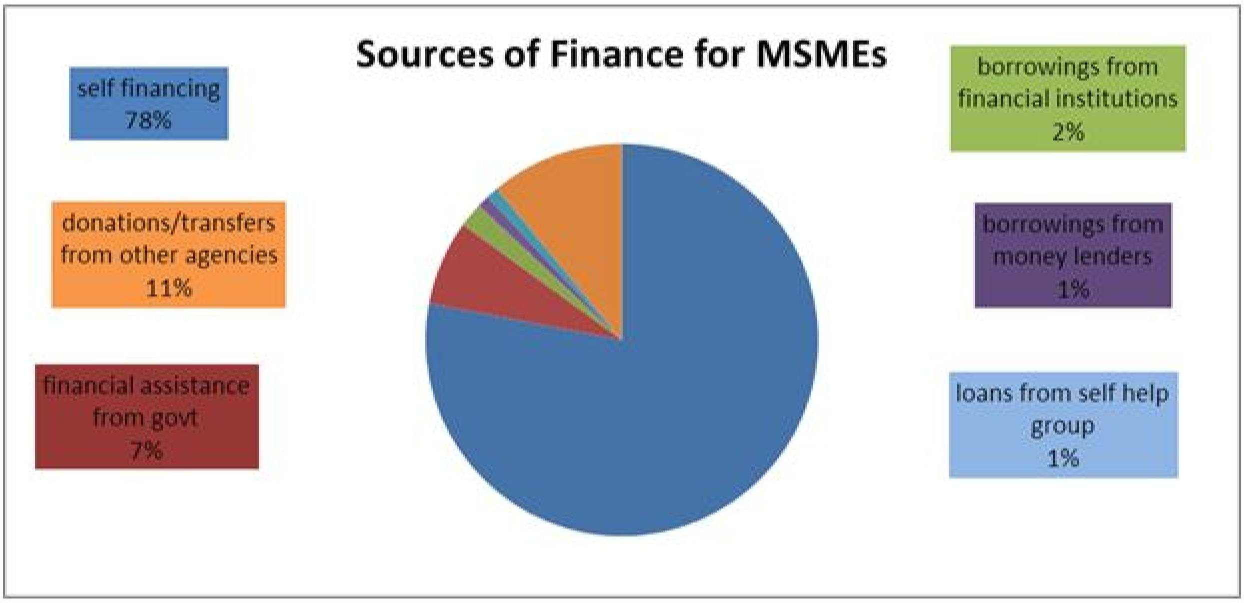

Figure-3: Source: Annual Report M /o MSMEs 2016-17

12. As reported in The Mint newspaper issue of 3rd January 2019, yet another Government initiative is to raise annual sales limit of MSMEs from Rs. 20 lakhs to Rs. 75 lakhs for registration to GST, thereby offering them some relief.
13. RBI has allowed lenders for onetime restructuring of MSME bank loans below Rs. 25 crores. This facility shall be provided to those MSMEs who are in distress and default as an aftermath of Demonetization and implementation of GST.RBI Governor Shaktikanta Das has shown willingness to meet with MSME representatives to address to their problems. RBI has also set up a panel under U. K. Sinha, former chairman of SEBI, to suggest long term structural and institutional measures to catalyze growth of this sector.
14. Role of NIMSME: National Institute for MSMEs which is a training institute under the Ministry of MSMEs, Government of India, undertakes lot of activities like training, consultancy, research, extension & information services vital for growth of and effective network of MSMEs in our country which is shown in the table below:

The Performance of the National Institute for MSMEs in FY 2016-17 & 2017-18

Programme	**2016-17**		**2017-18**	
	From April to December, 2017.			
	Programmes	**Trainees**	**Programmes**	**Trainees**
Entrepreneurship Development Programmes				
Programmes under Assistance of Training Institutions sponsored by M/o MSMEs				
NIMSMEs as Apex Institute				
Completed	135	4050	26	780
Other Programmes:				
National	896	32,809	603	19,508
International	14	370	8	206
Seminars & Workshops	62	3063	32	1662
Consultancy & Research	29	0	51	-
Total	1136	40.292	720	22,156

Table-5: Source: Annual Report M /o MSMEs 2017-18

8. CONCLUSION

MSMEs are labour intensive and what is needed utmost is to create an enabling environment for them to invest, grow and flourish. They must create jobs for the young Indians, push demand and thereby growth. GST with its

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impetus on increasing the number of tax payers through formalization of the economy shall boost this sector for rewarding entrepreneurship and generation of job opportunities in the formal sector. Digital technology and super-computing powers combined with other innovations will create an ecosystem conducive to better performance of this sector. In a recently concluded Global MSME Business Summit in Delhi on 19th December 2018, the MSME Minister said that Indian MSMEs have the capability to compete with global companies and can successfully become a part of 4th Industrial Revolution which is round the corner. This, he said, is due to support provided to them by Government through schemes like EODB, credit lending facilities, technical support and up gradation etc. Critics argue that all these new measures and initiatives launched by the present Government are too little and a bit too late considering the fact that MSMEs suffered severe hardships due to the twin impact of Demonetization and introduction of the flawed GST regime. Many of them were shut down and some others were forced to lay off their employees. However, leaving aside the politics, one can hope that these initiatives will alleviate the distress of MSME and boost their revival. To conclude, let “small” remain beautiful in India.

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EVALUATION OF GOVERNMENT POLICIES AND INITIATIVES ON AGRICULTURAL SECTOR AND ITS IMPACT ON FARMER'S SUICIDE

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ABSTRACT
The economy of our country is majorly divided into three sectors viz, Primary sector (Agriculture), Secondary sector (Industry) and Tertiary sector (Service). Agriculture being the primary sector has contributed tremendously towards the GDP (Gross Domestic Product). Due the introduction of Service sector the Agricultural sector is slowly and gradually fading away. However, the Government has taken a lot of initiatives to rebuild and strengthen the Agricultural sector of India. NAP (National Agricultural Policy)' 2000 is one such policy initiative taken by the government to support an uplift the agricultural sector of India. This policy was primarily initiated to support the inherent strength of Agriculture and all its allied sectors. Making optimum use of resources with respect to Agriculture will lead to a new economic era in the country. NAP, 2000 encourages showcasing the growth of extremely potential Agricultural sector of India for which rural infrastructure is needed as it will give a momentum to the Agricultural development of the country.

Keywords: Agriculture, Sector, Service, Resources, Initiative

INTRODUCTION
Agriculture in India is primarily affected due to Irrigation facility, pricing policies in the region of Maharashtra which forces them to use Micro- irrigation namely sprinklers as its prime way of irrigation. Government has undertaken many initiatives to conclude the problem of Agriculture with the help of canal irrigation and well irrigation facilities. In the regions such as Pune and Nashik, well irrigation for Agriculture is considered 1.5times better than that of canal irrigation. Government has also taken initiatives other initiatives namely Buffer Stock System, Minimum support price to support the Agricultural backlog happening sue to the entrance of Service sector into the economy.

Corporate/Contract farming is one such form of concept bought in by the government to encourage private participation into the world of Agriculture. There are other Agricultural initiatives such as Procurement price, Fair Remuneration price, Commission for Agricultural costs and prices & Food Corporation of India which have been started by the government to provide common platform to the farmers to reduce Farmer's Suicide.

FRAMEWORK OF STUDY
OBJECTIVES OF THE STUDY
Primary Objective
1. To understand the views of the Farmers on Contract/Corporate Farming.

Secondary Objectives
- To know the reasons of Farmer's suicide.
- To know the need of the Farmers.

RESEARCH METHODOLOGY
The research is primary a sample survey. Random sampling method was used for the study.

The sample size is 100 farmers.

ANALYSIS OF THE QUESTIONNAIRE
Attribute Analysis by sample

Options	Yes	No
Concept awareness	60%	40%
Help through Government Initiative	64%	36%
Difference between pre and post liberalization	64%	36%
Help in controlling Farmer's Suicide	64%	36%
Any Changes	40%	60%

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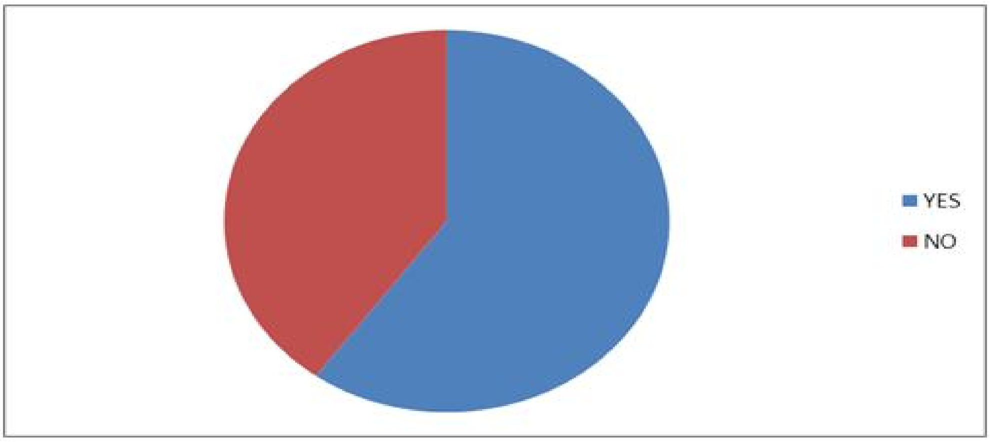
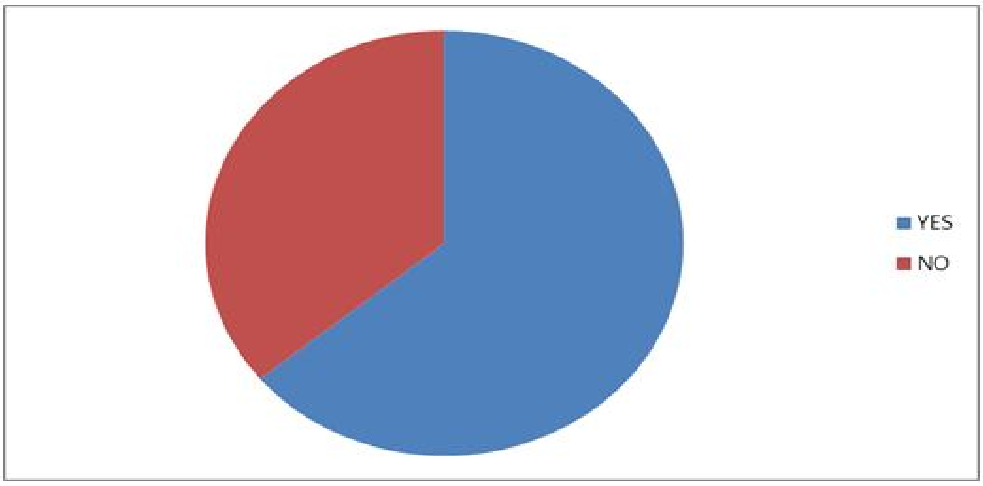
Q.1. Do you know about Corporate/Contract Farming?



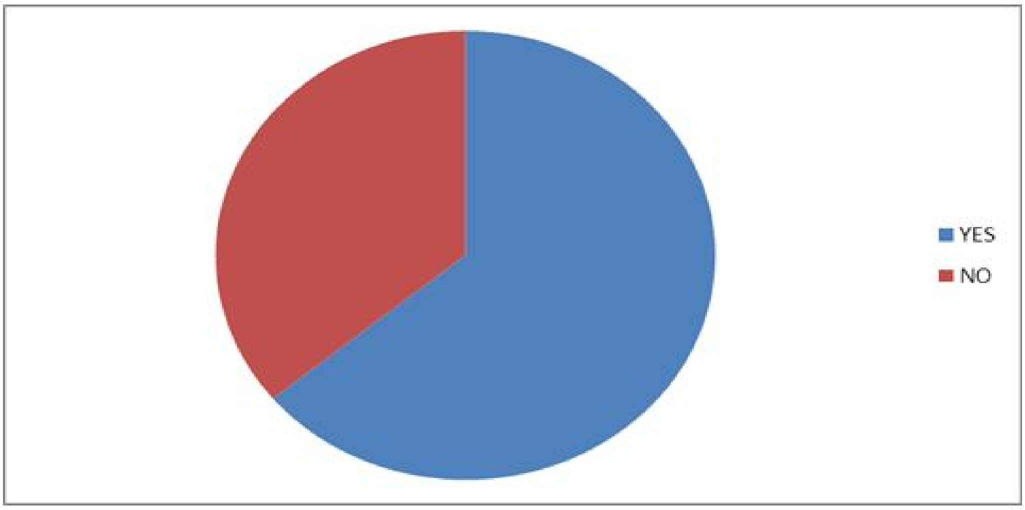
Interpretation: As per the survey, 60% of the farmers responded in favor of knowing the concept of Corporate/Contract farming.

Q.2. Has initiatives taken by the Government (For Agriculture) helped you in any way?



Interpretation: According to 64% of the farmers surveyed, the initiatives taken by the government in terms of Agriculture has helped them immensely. On the other hand, 36% of the farmers surveyed, expressed that initiatives didn't prove to be any help for them.

Q.3. According to you, is there any difference in agriculture from liberalization period to post liberalization?



Interpretation: According to the survey, 64% of the farmers expressed that they have experienced major changes post liberalization policies in Agricultural sector. On the contrary, 36% of the farmers think that the policies are still quite stagnant.

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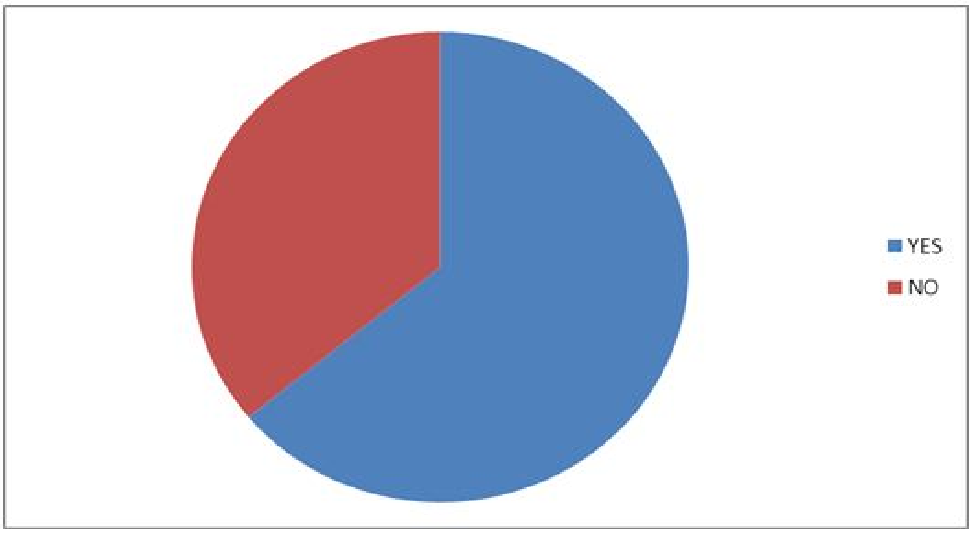
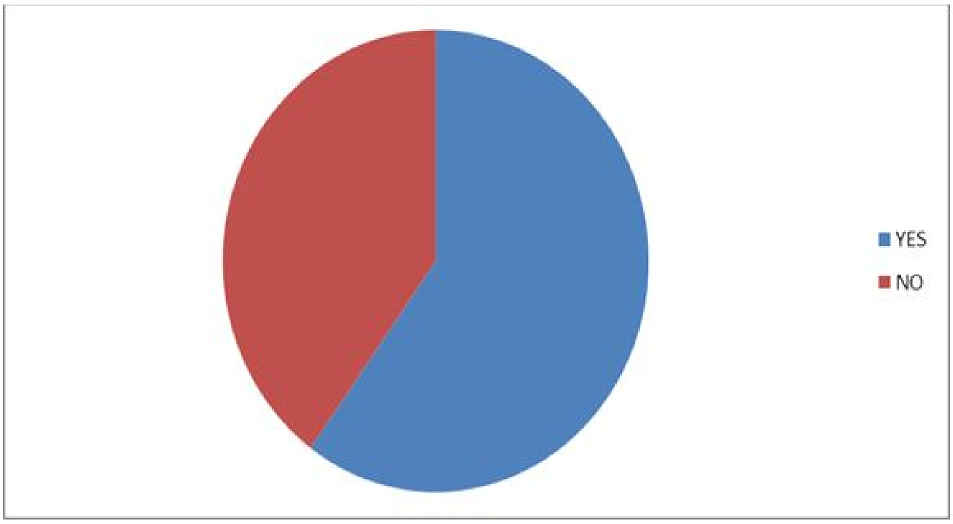
Q.4. Has government policies helped in controlling Farmer's Suicide?



Interpretation: According to the survey, 64% farmers think that the new policies and the relaxation has brought a wide change in the number of farmer's suicide and it has decreased incredibly. On the other hand, 36% farmers think that there is no change in the number of suicide's of farmers presently.

Q.5. Do you want to bring about any changes in the current Agricultural policies taken by the government?



Interpretation: According to the survey, 60% of the farmers feel that the current policies are appropriate and need no change but other 40% farmers are dissatisfied and feel there should be change in the current policies in the field of Agriculture.

OBSERVATION AND FINDING

Out of 100 respondents on an average 65% of the farmers were satisfied with the current policies, processes and working of the government in the field of Agriculture whereas, 35% of the farmers are still dissatisfied and want some changes in Agricultural policies in the form of relaxation in taxes and more of subsidies.

According to many farmers, number of suicides has decreased as the policies such as NAP, 2000, Contract/Corporate farming, Buffer stock system, Minimum support price etc have been in favor of the farmers.

Many of the farmers have also witnessed changes in the policies post liberalization period in India.

CONCLUSION

Many of the farmers had similar responses towards the policies created by the government. All the initiatives taken by the government are primarily in their favor which has proven to be beneficial for them. Some of the farmers have still not overgrown the fact of new policies brought in which has totally hampered their ideologies.

The government has majorly supported to boost the Agricultural sector in India with the help of initiatives taken by them.

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A STUDY ON GOVERNMENT POLICIES FOR SKILL DEVELOPMENT OF MILLENNIALS IN INDIA

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ABSTRACT
Millennials is the generational demographic cohort. It is also known as Generation Y or Gen Y. By 2020, Millennial will become 50% of total global workforce and hence it is necessary to develop their skills. India has over 47% of total population from millennials group. India has great advantage in human resource, but it will be no more till 2050 and hence it is very important to use those human resources efficiently and effectively. This paper is about various skill development programme implemented by Government of India for Millennials generation and their outcome. This paper also about the skill gap in India and what can be done to fill that gap.

Keywords: Millennials, Skill Development, Skill gap, Government of India.

OBJECTIVES
1. To study the selected skills development programme implemented by central and state government.
2. To understand the skills gap among millennials in India.
3. To give suggestion to regulatory bodies about skill development programme in India.

REVIEW OF LITERATURE
S D Uma Mageswari, Chitra Sivasubramanian and T N Srikantha Dath (2016) "This study considers "Use of Government Facilities (GF)" as a new enabler of KM in manufacturing companies in Tamil Nadu, India. It is found that the use of GF is directly proportional to the extent of KM adoption."

NEVBAHAR ERTAS (2016) "suggested implications for both public agencies and organizations looking for volunteers to provide their services. For public agencies, recruitment and management strategies that appeal to individuals' public service motivations are recommended."

Nigel Meager (2009) "As far as policy development is concerned, the case against mass, 'broad brush' training programmes within the overall ALMP portfolio seems convincing. If greater integration between employment and skills policies is to be achieved in the UK and elsewhere, the evidence suggests that flexible, small-scale training interventions, targeted on specific groups for whom skill deficiency has been identified as a real barrier to work entry, are most likely to be effective, particularly where such interventions are coupled with real work experience or job placements."

METHODOLOGY
This research paper is based on secondary data. Secondary data includes data from Ministry of Skill Development and Entrepreneurship, Published report of Government of India on Skill development, etc.

SKILL DEVELOPMENT PROGRAMME BY GOVERNMENT OF INDIA
1. National Skill Development Mission
National Skill Development Mission was officially launched on 15th July, 2015 by our honourable Prime Minister Narendra Modi on the day of World Skill Day. The Mission is to develop and make India Skilful. The vision of National Skill Development to make "Skill India" .The various schemes was implemented by regulatory mechanism of Ministry of Skill Development and Entrepreneurship (MSDE). The mechanism to achieve the mission objectives are divided into three:

A. Governing Council for policy guidance at apex level

B. Steering Committee and a Mission Directorate (along with an Executive Committee) as the executive arm of the Mission. Mission Directorate will be supported by three other institutions: National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC)

C. Directorate General of Training (DGT) – all of which will have horizontal linkages with Mission Directorate to facilitate smooth functioning of the national institutional mechanism.

Seven sub-missions have been proposed initially to act as building blocks for achieving overall objectives of the Mission. They are:

(i) Institutional Training,

(ii) Infrastructure

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(iii) Convergence

(iv) Trainers

(v) Overseas Employment

(vi) Sustainable Livelihoods

(vii) Leveraging Public Infrastructure.

India currently facing lots of problem for skilled and semi-skilled workers. It is estimated that 68% in the UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea and only 2.3 % of the workforce in India has undergone formal skilltraining. Large sections of the educated workforce have little or no job skills, making them largely unemployable. Therefore Government of India should focus on the skill development programme to meet the need of employer. In the absence of required required skills for the job the young generation will remain unemployed which will make negative impact on economic growth of the country and standard of living will go down, Per capita income will decline and hence GDP will fall.

India's total skill capacity was & million during the period of 203-14. Apart from meeting its own skills demand, India has a potential to provide skill workforce to world's developed nation's. India is one of the youngest nations in the world, 62% of the total population is in the age group of 15 to 59 years where more than 54% of the population is below 25 years age. India's total population is expected to increase across the 15-59 age group in the next decade. India will enjoy this demographic advantage only until 2040. India therefore has a very less time frame to harness its demographic dividend and to overcome its skill shortages.

2. Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) has approved for another four years (2016-2020) to benefit 10 million youth in India. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is one of the important scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The objective of Pradhan Mantri Kaushal Vikas Yojana is to enable many India's young young generation to take up industry-relevant skill training which will will help them in securing a better livelihood. Individuals with prior learning experience or skills will also be assessed and certified under Recognition of Prior Learning (RPL). The fees for availing this programme is paid by Government of India.

Key Components of the Scheme

1. Short Term Training
2. Recognition of Prior Learning
3. Special Projects
4. Kaushal and Rozgar Mela
5. Placement Guidelines
6. Monitoring Guidelines

3. SANKALP (Skills Acquisition and Knowledge Awareness for Livelihood Promotion)

SANKALP comprises of four key result areas

1. Institutional Strengthening
2. Quality Assurance
3. Inclusion
4. Expanding Skills through PPPs.

The results shall be achieved in time bound manner by utilizing the project funding of $675 Mn (Rs. 4455 crore). The project is financed by three major parts:

1	World Bank	$500 Million (Rs. 3300 crore)
2	State Leverage	$100 Million (Rs. 660 crore)
3	Industry Leverage	$75 Million (Rs. 495 crore)
	Total	$675 Million (Rs. 4455 crore)

Source: Ministry of Skill Development and Entrepreneurship, Published report

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a. World Bank loan assistance of $ 500Mn (Rs. 3300 crore) under Program for Results (PforR) instrument which includes Program funding and Technical Assistance (TA)

b. States' contribution $100 Million (Rs. 660 crore)

c. Industry contribution of $75 Million (Rs. 495 crore)

4. UDAAN

Udaan is the Special Industry Initiative (SII) for J&K is implemented by National Skill Development Corporation (NSDC) and financed by Ministry of Home Affairs. The main objective of the UDAAN is to address the economic issues in J&K. The steps are being taken by the State and Central Government to improve economic activity in J&K. under the programme of Udaan special initiative are taken to address the needs of the educated unemployed in J&K. Udaan program is focuses on young generation of Jammu & Kashmir (J&K) who have completed their three year diploma, post-graduation or graduation. Programme's overall aim is to make them employable by training and inculcating skills among them. In addition to that, other aim is also to provide exposure to corporate India towards the rich talent pool available in J&K. The target is to reach around 40,000 within 5 years. It was observed that the young generation of J&K are unable to find the jobs in India and outside because of lack of knowledge and companies are also missing this pool of talent located in J&K. The main object of UDAAN is to fill this Gap. Udaan encourages corporates to come and hire youth of J&K. Udaan provides a framework of support to the youth to travel and undergo training in firms and transit to work.

Udaan has two objectives

- To provide exposure to the graduates and post graduates of Jammu and Kashmir to the best of corporate India.
- To provide corporate India with exposure to the rich talent pool available in the state

The key stakeholders are

- Ministry of Home Affairs (MHA) - Chief Benefactors
- State Government (Jammu & Kashmir)
- Corporates - Training Partners
- Implementation Agency (IA) NSDC

The main aims of the programme is to cover 40,000 young generation of J&K within a period of 5 years. Ruppes 750 crore has been allotted for implementation of the programme over a period of 5 years to cover incidental expenses such as travel cost, boarding and lodging, stipend and travel and medical insurance cost for the trainees and administration cost and corporates are eligible for partial reimbursement of training expense incurred by them for the candidates who have been offered jobs.

Udaan as on 10th July, 2015

Milestones	Figures
Youth who have joined Udaan training programs till date	10,555
Placement Offers Made	4,984
Cumulative Corporates successfully partnered with Udaan	74
Cumulative commitment for 5 years	94,300
Udaan selection drives conducted till date	585

Source: Ministry of Skill Development and Entrepreneurship.

Standard Training Assessment and Reward (STAR) Scheme:

The National Skill Certification and Monetary Reward Scheme, known as STAR (Standard Training Assessment and Reward),was operational between August 2013 and September 2014.

NSDC is the designated implementing agency of the scheme and is working through various Sector Skill Councils (SSCs), Training Providers (TPs) and independent Assessment Agencies (AAs).

The achievements made under the scheme as on Feb, 2015 are as under:

Outcomes: (As of 03 July 2015)

Enrolled	14,00,848
Training completed	14,00,844
Assessment Completed	13,62,296

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Passed	9,15,242
Certified	8,61,077
Reward Money Disbursed	833,144 (Rs. 851.67* Cr)

Source: Ministry of Skill Development and Entrepreneurship.

Sector wise skills Gap in India

Incremental Training Need across 34 Sectors (2017 to 2022)		
Sr No	**Sector**	**Incremental Human Resource Requirement and Training Need (in lakhs)**
1	Agriculture	24.5
2	Animal Husbandry	18
3	Fertilise	1
4	Textile Handloom and Handicraft	60
5	Automotive, Auto Components & Capital Goods	41*
6	Gems & Jewellery	35
7	Food Processing	33.7
8	Leather	25
9	Pharmaceuticals	14
10	Chemicals & Petrochemicals	12
11	Steel	7.5 (by 2025)
12	Rubber Manufacturing	6.7
13	Road Transport & Highways	62.2**
14	Ports & Maritime	25
15	Aviation & Aerospace	14.2
16	Railways	0.12
17	Power	15.2
18	Oil & Gas	7.3
19	Renewable Energy	6
20	Coal & Mining	2.6
21	Construction	320**
22	Furniture & Fittings	52.6
23	Paints & Coatings	9
24	Electronics and IT-ITeS	69#
25	Telecom	38.6
26	Retail	107**
27	Beauty & Wellness	82
28	Media & Entertainment	13
29	Tourism & Hospitality	49
30	Banking, Financial Services and Insurance (BFSI)	12
31	Logistics	42.9**
32	Healthcare 32	32(by 2025)
33	Security	31
34	Media & Entertainment	13
	Total	**1,282.12**
	***Capital Goods – 19 lakhs, Automotive – 22 lakhs ** Overlaps with other sectors # Electronics – 53 lakhs, IT-ITeS –16 lakhs**	

Source: Ministry of Skill Development and Entrepreneurship, Annual Report 2017-18

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SUGGESTIONS

Skill gap must take into the consideration while implementing the skills development programme. The programme should be more sector wise as each sector has different employment generation capacity. Special programme should be drawn for millennials as they can be edge for economic development of country through various sectors. Skill development programme should have more practical aspects and less theoretical aspects. Mechanism should be there to monitor and evaluate the performance of the programme on monthly or quarterly basis. Internal Control System should be developed to efficiently, effectively and smoothly functioning of programme.

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SKILL DEVELOPMENT STRATEGY FOR NEW INDIA @ 75

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ABSTRACT

Skill has both intrinsic and instrumental value. Processing a skill can be an end in itself giving individual greater self-confidence, self-esteem and dignity which results from the knowledge that they can stand on their own feet. Skilling is a lifelong process. Hence, skill up gradation and reskilling are fundamental components of skilling cycle. According to national policy for skill development and entrepreneurship more than 54% of India's population is below 25 years of age and 62% of India's population is aged between 15 and 59 years. India has opportunity to supply skilled labor globally and become the world's skill capital. However demographic advantage might turn into demographic disaster if the skill sets of both new entrants and existing workforce don't match industry requirements.

Recognizing the challenge, the government of India has launched many initiatives to equip fresh entrants with relevant skills and to upgrade the skills of the existing workforce. For harnessing the demographic advantage there it enjoy India needs to build the capacity and infrastructure for skilling existing and new entrants to labor force. This study will focus on current situation of skill development, its objectives, constraints and way forwards.

Keywords: Skilling cycle, skill development, skilled labor, demographic advantage, reskilling, up-skilling.

INTRODUCTION

India is on the cups of a major transformation. The economy is finally moving out of the negative legacies of the past. India has regained its position as the fastest growing large economy in the world. However, to meet the rising aspirations of our young population, India needs to achieve and sustain a high rate of GDP growth for next three decades. There will be several milestones in this long journey. The first milestone will be in 2022 when India celebrates the 75th anniversary of its independence. More ever, prime minister has given his call for establishing a new India by 2022. The strategy for new India @ 75 captures three key messages from prime minister.

1st development must become mass movement.

2nd development strategy should help achieve broad based economic growth and balanced development.

3rd strategy will bridge gap between public and private performance.

On August 15, 2022 independent India will turn 75. In the life span of nation, India is youthful and aspirational population deserves a rapid transformation of the economy which can deliver double digit growth, jobs and prosperity to all. The government has to be in vanguard of transformation of Indian economy. The strategy helps to define he role of government correctly.

Skills and knowledge are the driving forces of economic growth and social development of any country. Country with higher and better level of skills adjusts more effectively to the challenges and opportunities of world of work.

India is one of the few countries in the world where the working age population will be access of those dependent on them and as per the world bank this will continue for at least three decades i.e.; till 1040. India is today one of the youngest nations with more than 62% of population in the working age group and more than 54% of total population below 25 years of age. In fact in next 20 years labor force in industrialized world is expected to decline by 4% while in India it will increase by 32%. However only2% of total employees in India has completed skill development training. In today's age of globalization and technology volatility, skill building is an important quality of labor for improved productivity and economic growth. Skill building is a powerful tool to empower individuals and improve their social acceptance.

2. OBJECTIVES FOR SKILL DEVELOPMENT

For harnessing the demographic advantage that India enjoys. India needs to build the capacity and infrastructure for skilling existing and new entrants to the labor force. The goals to be met until 2022-23 are as follows:

- Increase the proportion of formally skilled labor from 5.4% of India's work force to at least 15%.
- Ensure inclusivity and reduce divisions on gender, location, organized/unorganized etc.

- Developing internationally complaint, national occupation standards and qualification cap that define a job role.
- Making all training complaint with national skills qualification framework
- Skill development should be made on integral part of secondary school curriculum.

3. CURRENT POSITION

India is one of the youngest nations in the world. India's workforce is second largest in the world after China's. China's demographic dividend is expected to start tapering off by 2015, India will continue to enjoy it till 2040. A dedicated ministry of skill development and entrepreneurship was setup in 2014 to implement the national skill development mission, to increase skilling and scale with speed and standard. On July 15 2015 the prime minister launched the skill India scheme to improve the relevance and quality of courses offered by industrial training institutes and private training providers, sector skill councils have been involved in the assessment and certification process. Courses are being aligned to national skill qualifications framework. The year and review released by MSDE suggest that govt. initiatives are gathering pace until 2017, 2.5 crore candidates have been skilled under the program since its inception. This includes 40.5 lakhs candidates trained under pradhan mantri kaushal vikas yojana and 74 lakh candidates under fee based training program run by National Skill Development Corporation.

4. CONSTRAINT

The national skill development policy estimates that only 5.4% of workforce in India has undergone formal skill training. India skill report 2018 states 47% of those coming out from higher educational institutions are employable. 835 of workforce are engaged in unorganized sector with limited training facilities. The major challenges to skill development are:

- Mapping skill requirements sector wise and geographically.
- Making vocational training an aspirational choice.
- Involving industry for improved quality and relevance scaling up the apprenticeship program.
- Putting in place an effective, internationally recognized assessment and certification system.

5. WAY FORWARD

1. **Mapping skill requirements for demand driven skill development ecosystem**
   - Skill development plans and strategies should be developed by geography and sector by mapping the availability of infrastructure.
   - Industry stakeholders must provide on their skill requirements.
   - Regular study of labor market should be conducted by MSDE and SSC's
   - Create vocational training innovation centers.
2. **Improving training delivery and quality**
   - Upgrade teacher traing institutes capacity and needs.
   - A single regulatory body with branches in all states should be setup to lay down minimum standards for all players in skilling system.
   - Scaling up RPL is required under PMKVY along with the focus on the identification of transferrable skills.
3. **Vocational educations in secondary schools**
   - Participation by private school should be intuited with lower interest rules on loans to expand training facilities.
4. **Apprenticeship programs**
   - Create awareness about recent amendments in the Act, 1961 and about NAPS.
   - Facilitate the integration of MSME sector into the apprenticeship system by linking MUDRA scheme.
5. **Skilling**
   - Mainstreaming skill development with education through a system for academic equivalence to ITI's qualification so that ITI's candidates option to attain academic qualification as well.

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- An overseas employment promotion agency should be setup at the national level under the ministry of external affairs.

6. Funding

- Alternative financial sources such as CSR fund AMPA funds, MGNREGA should be tapped to expand the skill program and contribute to national skill development fund.

7. Monitoring

- Since skilling is dynamic, it is necessary to monitor programs regularly. Hence, it is necessary to develop state level indicators which help in monitoring various govt. programs.

CONCLUSION

Economic growth is a reflection of jobs and skills and knowledge are requirements for any jobs. India's aim is to become the future skill capital of world and government is not leaving a single stone unturned. Employment landscape is changing swiftly and new jobs emerging with rapid disruption. New jobs require new skills which either does not exist or population is niche. Building skilling system to match new requirements is a need of the hour. Such strategy will set out where we are now and what it will take to achieve of becoming world's "SKILL CAPITAL" ready for future.

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LAND ACQUISITION, CONSENT AND DISPLACEMENT AT SINGUR

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ABSTRACT
The Singur Controversey refers to the land acquisiton controversy that took place in West Bengal in 2008. Farmland had been acquired by the West Bengal state government under the rule of eminent domain and been given over to Tata Motors. Tata Motors intended to use this land to make a factory for the car Tata Nano. There were massive protests against this alleged forceful acquistion of farmland, that was supported by opposition political parties, environmentalists as well as activists. The dispute was placed before the Calcutta High Court as well as the Supreme Court. While Tata Motors withdrew their factory plans from Singur, this controversey highlights a wider problem that is faced in India due to legislations that permit the Government to forcibly acquire land. This paper seeks to highlight the points in dispute in the Singur land acquisition controversy, and to assess its impact on the legislative framework of land acquisition in India, within a wider socio-economic context.

Keywords: Land Acquisition, Rehabilitation and Resettlement Act 2013, Singur Controvery, economic development, eminent domain

9. INTRODUCTION
The Left Front government of West Bengal had gradually shifted from supporting agriculture-driven growth to industrialization in the early 2000s- the gradual replacement of old Jyoti Basu-era policies with those bearing the imprimatur of his successor, Buddhadeb Bhattacharjee. The day Buddhadeb Bhattacharjee took oath after a thumping victory in the 2006 elections, Ratan Tata announced his plan to revolutionise Indian transport by making a car that would cost only one lac rupees- and the site of the factory for this was declared as Singur, West Bengal.

Reports soon emerged, however, that the acquisition of the nearly thousand acres of land was ‘forced’, and protests erupted across the state, snowballing into a major political conspiracy. It is to be noted here that the acquisition was not done by Tata Motors, but by the government of West Bengal, which then planned to lease out the acquired land to the Tatas. Amidst protests, the government signed the land lease deal with Tata Motors, and construction work began on the acquired site. Violence continued to escalate at the site- there were several rounds of talks between senior ministers of the then state government and opposition leader Mamata Banerjee, which failed to ameliorate the situation. Tensions were further exacerbated when Mamata Banerjee went on a nearly month long hunger strike to protest the acquisition, an event that resulted in her gaining huge political mileage. In this backdrop, Ratan Tata announced the suspension of work at the site. Following this, the then Governor of West Bengal, Gopal Krishna Gandhi, tried to mediate, and talks led to the announcement of improved compensation for the farmers. However, protests continued and finally, in October, 2008, the Tatas announced that they were relocating to Sanand in Gujarat.

In 2011, Mamata Banerjee and the Trinamool Congress won the elections, and formed a government; one of her key manifesto commitments had been to return the land to farmers, and , accordingly, the government promulgated an ordinance reclaiming nine hundred and ninety seven acres of land from Tata Motors, citing ‘non-performance’. Following this, the Assembly passed the Singur Land Rehabilitation and Development Act, 2011, to reclaim a further four hundred acres. Tata Motors moved the Calcutta High Court seeking relief, and the Supreme Court passed an interlocutory order stopping all land distribution until disposal of the first petition. The Single Judge of the Calcutta High Court upheld the validity of the Act, but the Division Bench dismissed it as unconstitutional. Finally, the Supreme Court invalidated the acquisition of land in Singur, and ordered the State government to return the land to the original owners in twelve weeks.

In this paper, I shall analyse, the differences between the Land Acquisition Act, 1894 and the 2013 legislation, judgments of the Single Judge and Division Benches of the Calcutta High Court, and the final verdict of the Supreme Court along with the impact of the above on larger questions of procedural fairness and economic development.

10.THE 1894 ACT VIS-À-VIS THE 2013 ACT- A REVIEW OF RELEVANT PROVISIONS
The first major area of divergence between the two Acts concerns consent. The old Act does not provide for consent as a requirement for acquisition, once the concerned authority decides to acquire a particular tract of land, it is not required to assess how it affects the land loser. In the new Act, for Public Private Partnership

(PPP) projects and for acquisition for private companies, 70% and 80% consent on the part of the landowners has been made a mandatory requirement. Further, Social Impact Assessment has been made a mandatory requirement, and the publication of the findings of the SIA in preliminary notices has been a welcome change.

The second major area is related to compensation provisions. The 1894 Act bases compensation on a formula based on the circle rates in the area, which are significantly lower than market values; the 2013 Act provides for compensation up to four times the market value and twice the market value in urban areas, thus providing for a much fairer compensation regime.

An amendment of the urgency clause is also amongst the major changes that need to be listed here. Earlier on, 'public purpose' was not clearly defined under S. 17 of the old Act, meaning that land could be acquired without any institutional safeguards to ensure that the acquisition was really required and justified because of public good. S. 40 of the new Act severely restrains the government's power in this area, by providing that such acquisition could only be justified for reasons arising out of the defence of India, national security or emergencies arising out of natural calamities. Several other safeguards, such as payment of eighty percent of the compensation amount prior to acquiring the land, have also been added to increase transparency and accountability.

These have been highlighted as they are the most relevant to the issues that were raised during the Singur dispute, and the subsequent cases. Several other important differences between the two Acts have, subsequently, been omitted from this discussion in the interest of clarity.

11.THE LEGAL DISPUTE AND ITS JOURNEY

The new Government of West Bengal had been elected on the promise of returning the disputed land to its original owners. To that effect, the government enacted the Singur Land Rehabilitation and Development Act, 2011, which sought to reclaim the land on the basis of 'non-performance' of Tata Motors. The Act had a proviso compensating the Tatas, however, the quantum of compensation, or the principles for the award of such compensation. Tata Motors thus claimed that the principles for award of compensation were repugnant to the Land Acquistion Act, 1894, and the statute was thus unconstitutional.

3.1 Single Judge Bench- Calcutta High Court

The matter was first heard by Justice I.P. Mukerji of the Calcutta High Court. Justice Mukerji applied the principle of presumption of constitutionality and chose to read the word 'compensation' in the Act as compensation computed under the provisions of the Act of 1894. He drew inspiration from the judgment of Lord Denning in a landmark British tenancy case *Seaford Court Estates v. Asher* the judgment laid down the principle that there was to be a presumption of constitutionality in case of statutes, and they would only be struck down if it was impossible to reconcile their provisions with the prevailing constitutional scheme. This was in consonance with the British view regarding the sovereignty of Parliament, meaning that courts should not interfere with the legislature except in the most extreme circumstances, as it was representative of the will of the people. In the aforementioned judgment, Lord Denning wrote a passionate defence of purposive interpretation of statutes, which was quoted by the learned Judge. A portion of Lord Denning's judgment is being reproduced here for purposes of illustration:

"It would certainly save the judges trouble if Acts of Parliament were drafted with divine prescience and perfect clarity. In the absence of it, when a defect appears a judge cannot simply fold his hands and blame the draftsman. He must set to work on the constructive task of finding the intention of Parliament, and he must do this not only from the language of the statute, but also from a consideration of the social conditions which gave rise to it and of the mischief which it was passed to remedy, and then he must supplement the written word so as to give "force and life" to the intention of the legislature."

It is also relevant to note that the Single Judge held that the test of 'public purpose' for acquisition of land under S. 4 of the 1894 Act was met, and that the employment generated by means of the setting up of a factory at that site satisfied the requirement of 'public purpose'.

3.2 Division Bench- Calcutta High Court

Tata Motors filed an appeal against the order of the Single Judge, and the matter was sent to a Division Bench of the Calcutta High Court, comprising Justices Pinaki Chandra Ghose and Mrinal Kanti Chaudhuri. The Division Bench set aside the judgment of the Single Judge, and made several important observations. Firstly, that payment of compensation was a right that was derived from Article 300 A, read with Article 31 of the Constitution, and that the State was obliged to pay compensation to Tata Motors, and that the present instance was not covered under Entry 18 of List II, as the State of West Bengal argued, but under Entry 42 of List III (

that this essentially amounted to an acquisition of the property of Tata Motors, and not agrarian reforms). Second was the issue of whether it was permissible for land that had already been acquired by the State to be revested in the State by means of a legislative instrument; the Court followed Inder Parshad v. Union of India to hold that that was impermissible. As such, the Court came to the conclusion that both the Land Acquisition Act, 1894, and the present Act occupied the same field, and went on to hold that the latter was repugnant to the former, and was thus null and void. In a concluding paragraph of the extremely lengthy judgment, the Bench provided a summary of its holdings:

"It appears to us that applying all these tests we have come to the conclusion that Singur Act speaks about acquisition. We have also compared the Act with that of the Land Acquisition Act and it appears to us that the Act has failed to come over the test laid down by the Supreme Court in several decisions. It appears to us that there is clear and direct inconsistency between the Land Acquisition Act and the Singur Land Rehabilitation and Development Act, 2011, and, in our considered opinion, such inconsistency is absolutely irreconcilable.

It further appears to us that the inconsistency is such between the provisions of the two Acts that it would be direct collision with each other and it is impossible to obey the one without disobeying the other. We further noted that in the instant case the acquisition is not for agrarian reforms, but if it was so then we could have saved the Act after bringing it under the agrarian reforms under Entry 18 of List II. Therefore, it appears to us that this Act fulfills the triple test laid down by the Constitution Bench in M. Karunanidhi (Supra) thereby it has to be declared as void under Article 254(1) of the Constitution."

3.3 Supreme Court

The decision of the Calcutta High Court was then appealed to the Supreme Court, and was heard by a Division Bench comprising Justices V. Gopala Gowda and Arun Mishra. The major point of contention before the Bench concerned the definition of 'public purpose' under the Act of 1894. Tata Motors argued that the definition of 'public purpose' was met because the original agreement with the Government of West Bengal was in furtherance of the state's industrial policy, which had the stated objective of creating employment. This was opposed by the respondents, who argued that the acquisition was not for a 'public purpose', as part VII of the 1894 Act, which encompassed a set of mandatory requirements, had not been complied with. Justice V. Gopala Gowda held that the Act must be interpreted in a fashion that protected the rights and interests of the most vulnerable sections of society; the Court observed that in this case, permitting non-compliance with the rules regarding eminent domain would practically hand over the power of eminent domain to the executive. The Court relied on the old legal maxim formulated in the English case Taylor v. Taylor that "if the manner of doing a particular act is prescribed under any statute the act must be done in that manner or not at all". His brother Judge, Justice Mishra, disagreed with certain parts of his opinion, and held that the definition of Section 3(f) of the Act of 1894, which defines 'public purpose', could potentially be met by actions in furtherance of an industrial policy geared towards creating employment; he held that the public purpose test was indeed met. However, he held that Section 5A (which relates to hearing of objections) was a mandatory provision, and because it had not been properly complied with, principles of natural justice have not been followed, and, thus, the entire acquisition process stands vitiated.

We thus see that although the Supreme Court quashed the present acquisition, the judges did so for very different reasons- Justice Gopala Gowda and Justice Mishra disagreed fundamentally on whether the public purpose test was met, and based their reasoning on completely different reasons, with Justice Gopala Gowda holding that the acquisition was untenable because of non-compliance with Part VII of the Act, while Justice Mishra quashed the acquisition on the grounds that the principles of natural justice enshrined in Section 5A of the Act were not followed, and the non-compliance with a mandatory provision was a fatal flaw in the acquisition process.

On the issue of compensation and the return of the land to unwilling farmers, the judges were of one mind, and ordered that *"Possession of the lands be restored to the landowners/cultivators within 12 weeks from the date of receipt of the copy of this judgment and order. The compensation which has already been paid to the land owners/cultivators shall not be recovered by the state government as they have been deprived of the occupation and enjoyment of their lands for the last ten years. The landowners/cultivators who have not withdrawn the compensation are permitted to withdraw the same which is in deposit either with the Land Acquisition Collector or the Court."*

12.WHAT IS THE STATUS OF THE LAND?

The genesis of the Singur dispute lies in the fact that the land which had been acquired had been extremely fertile agricultural land- this was the principal reason why so many of the leaders of the resistance to the acquisition (organisations like 'Bhumi Uchhed Pratirodh Committee') were agriculturists. However, it is worth

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noting that the damage done to the land in the whole process (from 2006-2016) has rendered it unfit for cultivation in many cases- resulting in the victory being a Pyrrhic one for the Mamata Banerjee government, and leading to larger questions being raised about the efficacy of judicial mechanisms in dealing with such cases, since time is of the essence in ensuring that land, especially agricultural land, does not lose the properties that make it such a valuable asset in the first place. Thus, the larger issue of Singur definitely needs to factor in the fact that the land, when it was ultimately redistributed, failed to have much value for the unwilling farmers who had fought such a long and hard battle to regain it in the first instance.

13.CONCLUSION: IMPACT ON ECONOMIC DEVELOPMENT

The 2013 Act aims to address many of the issues of procedural fairness that existed with the colonial era legislation. The consent clause and the changes to compensation provisions, as well as the urgency clause, are all immense improvements on the colonial legislation, at least in theory. However, critics of the Act have pointed out how the Act created a lot of hurdles in the path to land acquisition- it is really difficult to obtain consent from 70% or 80% of landowners, especially in a country where landholdings are as fragmented as India. To take a hypothetical example, if the same clause were in operation at the time the West Bengal Industrial Development Corporation acquired land in Singur, it would have had to speak to hundreds of landowners, since the average size of an agricultural plot in the area is quite small. The ‘democratisation’ of the process, which includes both the consent clause as well as the involvement of local government institutions such as panchayats, also have the potential of making any sort of land acquisition for developmental purposes difficult, as the increase in the number of participants in the discourse is only likely to create further discord and disagreement. It is with a view towards addressing some of these concerns that the Narendra Modi government sought to legislate certain amendments to the Act, and even promulgated several ordinances to that effect; however, it was forced to withdraw these changes following public outcry.

A developing country like India, which seeks to industrialise itself and become a modern economy, risks limiting itself if it makes acquisition of land difficult for private businesses. A great challenge that has been faced by India post the 2008 financial crisis is the sluggish rate of private investment. This risks becoming a permanent feature, at least as far as businesses that require large amounts of land (such as manufacturing businesses) are concerned, if it does not become easier for private parties to acquire land. This has a detrimental effect on overall economic development, and a very real impact on job creation.

The reason the authors have chosen to highlight the problems with the new strict land acquisition regime is in order to ensure that the conversation around land acquisition does not happen from purely ideological standpoints, but factor in an element of pragmatism. A lot of the provisions in the new Act, while in perfect consonance with the rights-based approach that finds favour in legal academic circles today, do not answer practical questions relating to job creation and creation of industries, that ultimately have long-term benefits for the economy. It is essential that we adopt a middle ground and move away from some of the harsher provisions of the new Act, in the interest of overall economic development of the country. In an age where countries are competing with each other at an unprecedented rate on the economic front, it is important for India to not paint itself into a corner by means of laws that are patently unfriendly to business.

This, however, does not mean that the rights and views of ordinary farmers and landlosers should not be taken into account; we contend that these should continue to receive high priority. However, certain institutional mechanisms need to be developed that ensures that the provisions of the new Act are not abused. To that end, the authors wish to make certain suggestions that we believe would make the land acquisition regime a more business friendly one, without rendering it an unfair law that does not account for the most vulnerable sections of society:

Firstly, the consent clause needs to account for exceptions in case of industries which it is imperative for India to establish- for instance, energy industries. India is a huge country, and has massive energy requirements- it is imperative that the strict rules that exist with respect to land acquisition be relaxed for private companies that work in crucial public utility areas. It is also imperative that the statute creates a distinction between acquisition of agricultural land and non-agricultural land, with differential rates of compensation for different types of land. It is illogical for compensation to be paid at the same rates for ‘banjar’ land as it is for land containing fertile alluvial soil. It is thus important to balance the twin interests of social progress and economic development in any model land acquisition statute.

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CHANGE IN STOCK PRICE OF BANKS AND CREDIT RATING

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ABSTRACT

Credit rating is now a popular instrument used by all the industry to borrow fund. As the rating gives the idea of risk associated with the instrument to the investors and high rating reduce the cost of borrowing for issuer, as it carry low risk. This paper analyzed the impact of rating announcements on the stock price. This part is not yet analyzed by any one. My study is in Indian banking context. The banks which is considered for study is private banks, listed in S&P BSE Index. Total 10 bank were listed in S&P BSE Index, among that 7 Private Banks are taken. The duration of study is 10 year, from Jan 2008 to Dec 2018. Data is taken from the database CMIE ProwessIQ. Event window for the study is 30 days. Result of the analysis shows that not only change in rating has impact on stock price, but the initial announcement of rating is also impact the market return. There is no Correlation between upgrade and positive return on stock and vice versa. But our result shows that if the rating announcement is down for the highest rated instrument have positive impact and rating announcement with rating contain high risk have negative impact.

Keywords: Rating announcement, Event Window, Stock return, AR, CAR.

INTRODUCTION

Credit Rating Industry is an emerging market in India. It started in 1989 and first agency was CRISIL, subsidiary of S&P global rating agency. In US it stated long back i.e. 1905 and Moody's Investor Services was the first agency. Credit Rating shows the risk associated with the investment in rated firm. In case of bank they have own internal rating system apart from the credit rating. High rating is very important for the issuer perspective, investor perspective and regulator. It reduces the cost of borrowing for investor if having good rating. For investor it is easy to know the risk of investment. While giving rating to the instrument agency is considering all the factors related to firm like, financial, business, industry and economic risk. For initial rating all of these variables are considered but not necessary to have constant rating over the period. Till maturing rated instrument are under observation of rating agency.

In this paper we will try to find out the change is stock price of a rated banks listed in S&P BSE Index, before and after rating. The stock price is affected by many variables like country's economy, political condition, change in country's rating etc. some important factors are demand and supply of stock as per investors sentiment, market price of stock, dividend announcement, inflation, interest rate etc. similarly rating is also got affected by many factors including microeconomic and macroeconomic variable. Now a days bank are trying to improve the financial position of the country, infrastructure to receive good rating. We will take only the rating of particulars bank's instrument and their stock price, all other variable are constant here. Ratings are available to the public and banks evidence is also available to public like annual report, quarterly performance report, RBI policies. If change in stock price occurs due to rating means some private information is available only to the rating agencies and that is unavailable for public. This paper will analyze the change in stock price of banks listed in BSE due to rating announcement, and change in rating, either upgrade or downgrade.

2. LITERATURE REVIEW

Many literatures are available on the stock price, bond rating change and sovereign rating. According to "Barron et al., 1997; Ederington and Goh, 1998; Goh and Ederington, 1993, 1999; Griffin and Sanvicente, 1982; Holthausen and Leftwich, 1986; Impson et al., 1992; Liu et al., 1999; Matolcsy and Lianto, 1995; Wansley et al., 1992; Zaima and McCarthy, 1988" in general concluded that upgrade of bond having no impact on stock price. Few other researches on the same filed by McCarthy and Melicher, 1988 showed that downgrade of bond rating not having impact on individual firm but it impact the stock price of the other company belongs to same industry. Ederington and Goh, 1998; Holthausen and Leftwich, 1986; Glascock et al., 1987; Griffin and Sanvicente, 1982; Zaima and McCarthy, 1988, gave evidence that downgrade of rating having significant negative impact on stock and equity return. From all the above studies we can conclude that the downgrade of rating has negative impact but upgrade of rating is constant or no impact. Also downgrade of a particular company's rating affect the stock price of the industry that belongs to.

Most of the research is done on combined industry, specially related to change in rating and impact on stock price. The studies are too old, more than decades. The latest studies by Brooks, R., Faff, R. W., Hillier, D., & Hillier, J, 2004, investigate that downgrade of sovereigns credit ratings have negative wealth impact on stock

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return. Not only stock return but also it impacts country's' domestic stock market and value of currency negatively. At last they didn't find any evidence regarding "the market reaction due to multiple rating changes or sensitivity of emerging market to rating change". They try to fill the gap between the stock price and sovereign rating. After that many other researches is carried out by many authors on banks rating and sovereign rating. Williams, G., Alsakka, R., & Ap Gwilym, O., 2013, analyzed that credit rating of bank is directly related to the sovereign credit rating in emerging market. Upgrade and downgrade of sovereign credit have strong impact on upgrade and downgrade of Bank's credit rating. Banks credit rating is affected by the country's macroeconomic conditions, economic and financial freedom. They only talks about the factors affect which is related to country but also having it's impact on credit rating. Whereas, Drago, D., & Gallo, R. 2017, they find that sovereign credit rating have direct impact on banks. Downgrade of sovereign rating affect the bank's capital ratios and lending supply, Whereas upgrade of sovereign rating don't have any significant impact on banks. From all the available evidence they concluded that "rating based regulation affect the activity of domestic banks in all measures, that causing negative externalities for financial institution".

This paper's aim is to fill the gap between stock price and banks rating. Williams, G., Alsakka, R., & Ap Gwilym, O., 2013 studies the impact of banks rating and sovereign rating. Drago, D., & Gallo, R. 2017, analyzed the impact of sovereign rating on bank's ratios. So far there is no study on the change in stock price of bank due to its credit rating. Especially in case of Indian banks there is no research is done so far in this field. India is a developing country need strong financing industry for the development and Banks plays an important role in funding. So, Banks required more and more research to strengthen their market.

3. DATA & METHODOLOGY

For the study I took all the banks listed in S&P BSE index, which contain total 6 banks (only Private). The duration of study is from 2009 Jan to Dec 2018. The data is retrieve from the ProwessIQ CMIE for both rating as well as stock prices of bank. For analysis stock price is considered before and after ratings. The analysis is focused on the change in return before and after the announcement of rating.

We will find out the impact of rating announcement and change on market price of stock, by calculating the return 30 days before the rating and 30 days after the rating. So, our event window is 30 days. There are many announcement during this period happens but for study we took only few announcement that fulfill the criteria i.e. no consecutive announcement of rating, in between event window no other ratings are considered. First we calculated the abnormal return, which is "the returns earned that are not merely explainable by general market movement". To know the forecasted (ordinary) return we need alpha (α) and beta (β), that is the bank's recent performance track record and β which is its sensitivity to generate market movement. First we get α, β by 'random single index model' regression of the firms return into the market returns having a pre-event period.

$AR_t = R_t - R_J$

AR = Actual Return – Market Return

Where R_t = Return on stock on day t

R_J = Average return on stock

$R_{it} = \alpha + \beta r_{mt}$

Table-1: History of the Rating Announcement

Company Name	Date	Agency	Instrument	Grade	Rating	Status	Amount ((Million)
Axis Bank Ltd.	25/02/2009	ICRA	Certificate of deposit	Highest Safety	A 1+	Initial Rating	100000
		IND-RA	Debt	Highest Safety	AAA(ind)	Initial Rating	20000
	16/06/2009	CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	5000
		CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	456.1
	19/06/2009	CRISIL	Pass through certificates	Highest Safety	AAA(SO)	Initial Rating	3000
		CRISIL	Pass through certificates	Highest Safety	AAA(SO)	Initial Rating	284.5
	24/06/2009	CARE	Debentures / Bonds / notes / bills	Highest Safety	CARE AAA	Initial Rating	20000
	04/08/2009	ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	500
		ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	47.1
	23/10/2009	CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	7.5
		CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	7.3
		CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	6.8
		CRISIL	Pass through certificates	Highest Safety	P1+(SO)	Initial Rating	1000
	26/10/2009	ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	11.3
		ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	14.7
		ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	14.3
		ICRA	Pass through certificates	Highest Safety	A 1+(SO)	Initial Rating	4500
	27/10/2009	ICRA	Debentures / Bonds / notes / bills	High Safety	LAA+	Upgraded	
		ICRA	Debentures / Bonds / notes / bills	High Safety	LAA+	Upgraded	
		ICRA	Certificate of deposit	Highest Safety	A 1+	Upgraded	
		ICRA	Debentures / Bonds / notes / bills	Highest Safety	LAAA	Upgraded	
	18/10/2010	IND-RA	Medium-term loan	Moderate Safety	BBB-	Initial Rating	
	20/10/2010	IND-RA	Debentures / Bonds / notes / bills	High Safety	AA+(ind)	Initial Rating	6530
		IND-RA	Debentures / Bonds / notes / bills	High Safety	AA+(ind)	Initial Rating	2140

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Table-2: History of change in Rating

Company Name	Date	Agency	Instrument	Grade	Rating	Status	Amount ((Million)
Axis Bank Ltd.	27/10/2009	ICRA	Debentures / Bonds / notes / bills	High Safety	LAA+	Upgraded	
		ICRA	Debentures / Bonds / notes / bills	High Safety	LAA+	Upgraded	
		ICRA	Certificate of deposit	Highest Safety	A 1+	Upgraded	
		ICRA	Debentures / Bonds / notes / bills	Highest Safety	LAAA	Upgraded	
	08/05/2017	CRISIL	Debentures / Bonds / notes / bills	High Safety	AA+	Upgraded	35000
Bank Of Baroda	25/03/2016	CARE	Debentures / Bonds / notes / bills	High Safety	CARE AA	Downgraded	15000
		CARE	Debentures / Bonds / notes / bills	High Safety	CARE AA+	Downgraded	50000
		CARE	Debentures / Bonds / notes / bills	High Safety	CARE AA+	Downgraded	19117
City Union Bank Ltd.	17/09/2010	CARE	Debentures / Bonds / notes / bills	Adequate Safety	CARE A+	Upgraded	400
	06/02/2014	IND-RA	Debt	Adequate Safety	A+(ind)	Upgraded	400
H D F C Bank Ltd.	03/09/2009	ICRA	Second loss facility - securitisation	Adequate Safety	LA+(SO)	Upgraded	129.8
	04/11/2009	CRISIL	Second loss facility - securitisation	High Safety	AA+(SO)	Upgraded	132.6
		CRISIL	Second loss facility - securitisation	Highest Safety	AAA(SO)	Upgraded	96.2
		CRISIL	Second loss facility - securitisation	Highest Safety	AAA(SO)	Upgraded	174
	30/07/2010	ICRA	Second loss facility - securitisation	High Safety	LAA(SO)	Upgraded	129.8
		CRISIL	Second loss facility - securitisation	Highest Safety	AAA(SO)	Upgraded	132.6
I C I C I Bank Ltd.	04/12/2008	ICRA	Acquirers/Investors' share/payout in assignment of receivables	High Safety	LAA(SO)	Downgraded	953
		ICRA	Acquirers/Investors' share/payout in assignment of receivables	High Safety	LAA(SO)	Downgraded	862.3
	17/04/2009	CRISIL	Fixed rate pass through certificate	Adequate Safety	A(SO)	Downgraded	
		CRISIL	Fixed rate pass through certificate	Adequate Safety	A-(SO)	Downgraded	
		CRISIL	Fixed rate pass through certificate	Moderate Safety	BBB+(SO)	Downgraded	
	22/05/2009	ICRA	Acquirers/Investors' share/payout in assignment of receivables	Adequate Safety	LA-(SO)	Downgraded	604.9
		ICRA	Acquirers/Investors' share/payout in assignment of receivables	High Safety	LAA(SO)	Downgraded	558.1
		ICRA	Acquirers/Investors' share/payout in assignment of receivables	High Safety	LAA(SO)	Downgraded	220.2

4. ANALYSIS AND FINDING

For analysis in first step we calculated the beta for the seven banks listed in standard and poor Bombay Stock Exchange. To calculate it we used bank's stock return before the announcement of rating. Eij is the expected return of stock according to the market. We analyze the change in stock price of banks due to rating announcement. There were many announcements during the period Jan 2009 to Dec 2018. Some banks have many announce but have has few only. We will discuss all the banks one by one. Calculation of AR and CAR is shown in table for different announcement of all the seven banks.

AXIS BANK

Total 11 announcements is considered for the last 10 year. During this period only two announcements are made for upgrade of rating and no announcement for the downgrade. Table 10 shows much discrimination in the abnormal return and cumulative abnormal return. Some announcement gives significant result on AR and CAR but some shows non-significant result. The initial rating announcements have negative impact on the return but later announcement have positive impact. The initial rating announcements with high grade rating like, highest safety and high safety gives good market return after rating. But the announcement of rating have low rating gives constant or negative return. In the table 3 to 9, A1, A2, A3…., are the different announcement event day of particular banks.

Table-3: Result of Axis bank

	A1		A2		A3		A4		A5		A6		A7		A8		A9		A10		A11	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
AR(+)	16	12	17	16	18	18	15	19	18	20	17	22	14	17	15	18	14	13	10	15	15	14
AR(-)	14	18	13	14	12	12	15	11	12	10	13	8	16	13	15	12	16	17	20	15	15	16
CAR(+)	9	18	13	7	1	24	27	12	19	30	17	23	0	14	10	23	16	28	9	28	12	11
CAR(-)	21	12	17	23	29	6	3	18	11	0	13	7	30	16	20	7	14	2	21	2	18	19

HDFC

HDFC Bank is one largest bank in India. Eight announcements are considered for this bank during defined period. Most of the announcement are made during the year is initial rating. As we can see in the table no 4, first announcement shows the insignificant result. The return before rating was better than the return after rating. But in announcements 2, 3, 4 and 5 shows positive return after the rating. And last announcement of the rating for year 2018 shows constant return. Hence, apart from rating announcement sometime borrowing of the company affect the stock price.

Table-4: Result of HDFC bank

	A1		A2		A3		A4		A5		A6		A7		A8	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
AR(+)	18	9	13	17	19	10	16	21	13	20	17	13	18	16	17	15
AR(-)	12	21	17	13	11	20	14	9	17	10	13	17	12	14	13	15
CAR(+)	14	0	28	24	7	0	13	27	19	29	5	0	6	18	14	15
CAR(-)	16	30	2	6	23	30	17	3	11	1	25	30	24	12	16	15

ICICI BANK

During the period 2009 to 2018, more than 100 rating announcement were occurred. Some were initial, some upgrade, downgrade, reaffirmed, withdrawn, and suspended. Only few upgrade, downgrade and initial rating announcement is considered for the rating, who meet the criteria of analysis. There is many ups and downs of rating announcements is seen in the data got from CMIE ProwessIQ. Result is summarized in table 5, indicate that initial rating and upgrade announcements shows either constant or positive return but downgrade shows negative return. In some other announcements upgrades also shows the negative CAR. So we can't generalize the result that upgrade have positive and down grade have negative return.

Table-5: ICICI Bank result

	A1		A2		A3		A4		A5		A6		A7		A8		A9		A10		A11	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
AR(+)	14	14	16	16	14	9	12	12	15	12	16	19	14	19	13	18	16	17	17	19	16	14
AR(-)	16	16	14	14	16	21	18	18	15	18	14	11	16	11	17	12	14	13	13	11	14	16
CAR(+)	29	5	21	24	10	0	18	2	19	26	4	28	2	2	4	24	7	27	6	27	16	24
CAR(-)	1	25	9	6	20	30	12	28	11	4	26	2	28	28	26	6	23	3	24	3	14	06

INDUSIND BANK

From the table 6, it can be easily identified that, first announcement of Indusind Bank during 2009 to 2018 shows increase in abnormal return but cumulative abnormal return is negative till T+30 (30 days after the announcement). In further announcements it shows almost constant positive abnormal returns before and after rating announcements, but in CAR the negative count is more after announcement. Only announcement 5 shows good AR positive count and all CAR is also positive after the announcement.

Table-6: Result summary of ICICI Bank

	A1		A2		A3		A4		A5		A6		A7	
	B	A	B	A	B	A	B	A	B	A	B	A	B	A
AR(+)	16	18	16	11	16	17	17	13	16	20	12	9	16	15
AR(-)	14	12	14	19	14	13	13	17	14	10	18	21	14	15
CAR(+)	25	0	26	3	22	0	5	0	21	30	15	0	05	0
CAR(-)	5	30	4	27	8	30	25	30	9	0	15	30	25	30

KOTAK MAHINDERA BANK (KMB)

Kotak Mahindra Bank Limited becomes one of the largest banks in term of capital structure after merger with ING Vysya Bank. Merger occurs in between the study periods i.e. 2015. So, merger may have impact on stock price. In the initial announcement we can see that the negative AR is more after the rating but negative CAR is more before rating and less after rating. And in the last announcements AR and CAR after rating is better than before rating. Results are summarized in table 7.

Table-7: Result summary of KMB

	A1		A2		A3		A4		A5		A6	
	B	A	B	A	B	A	B	A	B	A	B	A
AR(+)	16	15	14	23	15	14	13	17	14	10	0	30
AR(-)	14	15	16	7	15	16	17	13	16	20	30	0
CAR(+)	02	13	7	27	16	0	9	29	24	2	28	30
CAR(-)	28	17	23	3	14	30	21	1	6	28	2	0

YES BANK

First announcement of Axis Bank is of 2009, which is initial rating assign to the instrument. It shows, in table 8, there is negative impact of rating on stock price. Whereas third announcement, A3 is upgrade announcement of rated instrument gives more positive AR after rating but CAR is negative for the event window. Similarly A5 and A6 is the upgrade of rating in year 2014 and 2018, but the result in negative after rating for both the rating. And the last announcement A7 is of 28th Nov 2018, which is for downgrade of rating, the result shows better return after rating comparative to before announcement, but there is increase in negative CAR.

Table-8: summary of result Yes Bank (YB)

	A1		A2		A3		A4		A5		A6		A7	
	B	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**	**B**	**A**
AR(+)	16	11	17	18	13	17	15	18	15	12	16	13	14	17
AR(-)	14	19	13	12	17	13	15	12	15	18	14	17	16	5
CAR(+)	27	0	13	26	21	0	5	29	5	1	18	0	12	1
CAR(-)	3	30	17	4	9	30	25	1	25	29	12	30	18	22

FEDERAL BANK

Table 16 gives the result of Federal Bank. One one announcement meet the criteria of the study. Result shows that return after rating announcement is better then before.

Table-9: Summary of Federal Bank Result

	Abnormal Return (AR)		CAR	
	Positive	**Negative**	**Positive**	**Negative**
Before Rating (B)	12	18	14	16
After Rating (A)	15	15	15	15

5. CONCLUSION AND DISCUSSION

In financial market banking industry plays an important role. It is one of the leading industries in the word. The market return is affected by many macroeconomic conditions. Change in microeconomic condition has significant effect on return of the bank. Banking rules and regulations, political condition etc. also impact the returns of bank. For example demonetization in 2016, impact the banks return.

In Indian banking sectors, we can see from the result that announcement of rating have significant impact on the stock return. This is may be because of different instrument and different rating grades. Also banks taken for the study is rated by multiple credit rating agencies (CRAs). So, the difference in stock return has been seen because of different agencies rating. All the CRAs have their own methodology to give rating. Some time the difference of stock return for same level of announcement is because of different instrument rating. If two agencies gave same rating grades to two different banks for same type of instrument may have different stock returns. This difference is may be because of methodology or amount of instrument. There should be a standard rating methodology for the all CRAs. It will able to create more trust among investors. The Bank is acting as a mediator between the public and corporate borrower. Banks are accepting deposits from the public and providing loan to the commercial. Stock return of the bank is affected by many financial and non financial factors. Credit Rating agencies provide rating to the banks instrument, that rating convey some news to the market. Investors perceived that information or news and influence their investment decision. So, we can say that rating has influence on investment decision of investors and it impacts the stock return. Hence, the rating has significant impact on stock price.

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MICROFINANCE: A WAY OUT FOR POOR

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ABSTRACT
Microfinance services are provided to unemployed or low-income individuals because most of those trapped in poverty, or who have limited financial resources, do not have enough income to do business with traditional financial institutions. Despite being excluded from banking services, however, those who live off of as little as $2 a day do attempt to save, borrow, acquire credit or insurance, and do make payments on their debt. Thus, many poor people look instead to family, friends, and even loan sharks-who often charge exorbitant interest rates-for help.

Microfinance allows people to take on reasonable small business loans safely, and in a manner that is consistent with ethical lending practices. Although they exist all around the world, the majority of micro financing operations occur in developing nations, such as Uganda, Indonesia, Serbia, and Honduras. Many microfinance institutions focus on helping women in particular.

Keywords: Microfinance, poverty, low-income, loans, small business entrepreneurs, unemployed.

INTRODUCTION
Microfinance, also called microcredit, is a type of banking service that is provided to unemployed or low-income individuals or groups who otherwise would have no other access to financial services. While institutions participating in the area of microfinance most often provide lending (microloans can range from as small as $100 to as large as $25,000), many banks offer additional services, such as checking and savings accounts, and micro-insurance products; and some even provide financial and business education. Ultimately, the goal of microfinance is to give impoverished people an opportunity to become self-sufficient.

Micro financing organizations support a large number of activities that range from providing the basics-like bank checking and savings accounts-to start-up capital for small business entrepreneurs, and educational programs that teach the principles of investing. These programs can focus on such skills as bookkeeping, cash-flow management, and technical or professional skills, like accounting. Unlike typical financing situations, in which the lender is primarily concerned with the borrower having enough collateral to cover the loan, many microfinance organizations focus on helping entrepreneurs to succeed.

In many instances, people seeking help from microfinance organizations are first required to take a basic money-management class. Lessons cover understanding interest rates, the concept of cash flow, how financing agreements and savings accounts work, how to budget, and how to manage debt.

STATEMENT OF PROBLEM
The problem worded as given below: “Micro finance: A way out for the Poor”.

OBJECTIVES OF THE STUDY
- To study the concept Micro Finance.
- To know the Different Microfinance Models in India:
- To identify the role of microfinance in development of the poor section of individuals in the society.

RELEVANCE OF THE STUDY
A country like India, where nearly 26% of the population lives below the poverty line, the concept of MFI should work very successfully. Also adding further incentive to this is the fact that the primary occupation in India is Agriculture and most Indians are farmers. The problem of private money lenders (loan sharks) has been existing for a very long time and MFIs should therefore be a fine solution. Establishment of MFIs all across India looks a very fruitful decision to make. Also considering the fact that in the 300-year history of MFI, it has been found that the level of default rate has been found least in case of MFI (less than 10% have defaulted)

LIMITATION OF THE STUDY
1. In the current research study, only SHG model has been studied and other models could not be studied.
2. There is no specific data on the research in microfinance all around the country and no proper means are available to carry out proper records and information.
3. The study is limited up to only secondary data. Here researcher is implementing the general awareness and experiences regarding SHG as other sectors don’t have much result data.

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RESEARCH METHODOLOGY

This research paper is outcome of the various articles in Magazines & newspaper and reports on micro finance India. The paper is made by using secondary data collection method.

SCOPE OF FUTURE RESEARCH

In this study, attempt has been made to study whether microfinance helps developing successful entrepreneurs. However further research can be done in the field of microfinance to know the impact of microfinance institutions on entrepreneurial development. Research can also be done in the role of NGOs in training and development of uneducated & unemployed individuals in becoming successful entrepreneurs.

DEFINITIONS OF MICROFINANCE

"Microfinance can be defined ―as the provision of broad range of financial services to low income clients, poor households both in urban and rural areas who are generally not bankable"

- (Debadutta Kumar Panda, 2009)

In the International Year of Microcredit 2005," Microfinance was referred to as, loans, savings, insurance, transfer services and other financial products targeted at low income clients."

DIFFERENT MICROFINANCE MODELS IN INDIA

India has a number of institutions that offer microfinance exclusively. Each institution uses a particular model or a blend of different models in order to provide microfinance to applicants. These microfinance institutions have embraced both conventional and advanced ideas of lending in order to distribute credit evenly in the society without uneven accumulation of credit among the rich people. There are many microfinance models in the country and this could be because of the high number of social and cultural groups, the large geographical size of the nation, the presence of multiple economic classes, and a solid existence of non-governmental organisations that are dedicated to uplifting the socio-economic condition of the disadvantaged people of the country.

1. Self-help group model

A self-help group (SHG) is described as a group of 5 to 20 individuals who belong to the low-income class. Each group member typically contributes funds from their own savings and then this money is pooled in together. These funds are then utilised to support their common goal of improving their lifestyles and to make the financially secure.

2. Grameen model

The Grameen model to distribute microfinance originated in Bangladesh. After seeing the success of the model in Bangladesh, many institutions in India started to adopt it by making some adjustments. This particular model believes in providing a mandatory training course to the group members for at least 7 days. The model will offer microfinance to an applicant without asking for any collateral at low costs. The loan application process has minimum or zero paperwork and is processed very quickly keeping in mind the urgency for funds.

3. Rotating Savings and Credit Associations (ROSCAs) model

Under this model, funds are offered to groups of individuals through unconventional means. The members of such associations include individuals who have certain common features such as ethnicity, community, language, professions, occupations, etc. These members contribute funds on a regular basis and utilise them for attaining a common goal.

ROLE OF MICRO FINANCE IN DEVELOPMENT OF THE POOR SECTOR

- Microfinance aims at developing financial sustainability among economically downtrodden people.
- Micro financing promotes simplified and small savings among poor people. It encourages them to build their funds step-by-step.
- Microfinance helps in creating more and more jobs. It enables uneducated people to be involved in some source of employment instead of staying idle.
- Microfinance aims at attaining socio-economic development at the most basic level of the society.
- It serves as a great instrument to eradicate poverty.
- It intends to enhance operations and activities at the grass root level.
- Microfinance aims to help women of poor families. Institutions that offer microfinance believe that women are more responsible with money and hence, they have exclusive microfinance loan options specially designed for women borrowers.

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CONCLUSION

- Microfinance is a field which aims at the low-income sectors of the society.
- It is a wide range of study and research which involves various aspects on the socio-economic development of the society.
- Microfinance can contribute to the inadequate services and resources in rural areas as an integral part of poverty alleviation program.
- It would be ideal to enhance the credit worthiness of the poor and make the bankable.

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COMPROMISE AND ARRANGEMENT UNDER COMPANIES ACT 2013

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ABSTRACT
Companies Act 2013 playing the vital role in the corporate sector. The act itself is providing the various guidelines regarding procedural part for administrations and management of a company section 230 it is related to the compromise or arrangement of company with the equity shareholders, preference shareholder, debenture holder and creditors. The applications for compromise or arrangement shall be made by the shareholders, creditors and liquidator of company in case of voluntary liquidation to the tribunal. With the proper guideline given in the act the tribunal issue an order for compromise or arrangement of the company.

Keywords: Compromises, arrangements, companies act, liquidation of company

INTRODUCTION
Compromise, arrangements and amalgamations of companies is important concept as per the Companies Act 2013. Under section 230 to 240 of Companies Act content provisions on Compromises, arrangements and amalgamations. This section covers Compromise or arrangements, mergers and amalgamations of companies in public interest. Under these sections the complete code contents provisions regarding all forms of compromises with creditors and arrangements with members given in details for the consideration the procedural aspects regarding these terms mention properly under the rule made under chapter XV of the Companies Act 2013.

OBJECTS OF THE STUDY
The company's act 2013 provides the details procedural part for the compromise or arrangement of a company. The basic object of this study is to

1) Understand the meaning of compromise as per companies act 2013
2) To understand the meaning of arrangement as per the companies act 2013
3) To under the procedure for compromise or arrangement with rightful claimants
4) To know the power of tribunal regarding compromise or arrangement as per companies act 2013.

Meaning: **-** Companies Act 2013 under section 230 states, the vital concept that compromise and arrangements under this section the proposal for arrangements and compromise given between a company and its creditors or the arrangements or compromise between company and its members. According to this section, the tribunal may on the application of the company or its creditors or members of the company or in case of company which is being wound up of the liquidator to be called and conduct meeting in a manner as per the direction given by the tribunal.

Compromise- As per Companies Act 2013 the compromise is not defined but compromise is nothing but agreement between two or more parties to a controversy to settle their differences by making mutual understanding, concessions and rearrangement as distinguished from adjudication, on the basis of an exact ascertainment of the opposing rights, therefore the compromise is narrow term as compared to the arrangement.

Arrangement: - Arrangement is a widen term applied in the company law it includes reorganization of share capital of a company or by the division of shares into shares of different classes or by both these methods. It also includes the arrangement of debenture holders for extension of payment, releasing their security in a whole or in a part. In case of preference share holder, the arrangement includes the change of preference dividend rate or reorganization of share capital or waiver of their arrears of dividend.

The Act: **-** Means Companies Act 2013.

Liquidation of Company: - means liquidation as per companies Act 2013 under section 272 and 273

APPLICATION FOR COMPROMISE OR ARRANGEMENT
The following entities or authorizes person shall apply to the tribunal for the compromise or arrangements.
1) The company
2) Creditors of the company
3) Members of the company
4) Liquidator in case of company is into voluntary liquidation

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Under section 230(2) the company or any person by whom an application is made shall disclose to the tribunal by affidavit regarding the actual facts of compromise or arrangements.

1) The all material facts relating to the company to the company such as financial statements include profitability statements and balance sheet with auditors report on the accounts of the company, any pendency of investigation of company or proceeding against the company.
2) Any reduction of share capital of the company
3) Any scheme of restructuring of debts of company consented to by not less than 75% of secured creditors in value it includes
   a) A creditors responsibility statements in the prescribed form.
   b) Safe guards for the protection of other secured and unsecured creditors.
   c) Report by the auditors for fund requirement of the company after corporate debt restructuring to confirm the liquidity test based upon estimates provided by the company board.
   d) Where the company propose to adopt the corporate debt restructuring guideline specified by the Reserve Bank of India.
   e) The valuation report of the registered valuer in respect of share and property and all assets including tangible and intangible assets, movable and immovable assets of the company.

Under section 230(3) of the companies Act the notice of such meeting shall be send to all creditors or class of creditors and to all the members or class of members, and the debenture holders of the company individually at the address registered with the company. Notice of meeting shall be accompanied by a statement disclosing the

   a) Details of the compromises or arrangements,
   b) a copy of the valuation report, if any and
   c) explaining their effect on creditors, key managerial person, promoters and non-promoter members, and
   d) the effect of the compromise or arrangement on any material interest of the directors of the company or the debenture trustees and
   e) Such other matter as may be prescribed under rule 6 of the companies

Such notice and other documents shall also be placed on the website of the company, if any, and in case of listed company, these documents shall be sent to the securities and Exchange Board and stock exchange where the securities of the companies are listed.

Under section 230(5) the notice to sectorial regulators also to be sent for to make representation if likely to be affected by the compromise or arrangement.

1) To the central Government
2) To the Income Tax Authorities
3) To the Reserve Bank of India
4) To the securities and Exchange Board
5) To the Registrar
6) To the respective stock exchanges
7) To the official liquidator
8) To such any other sectorial regulator or authorities which are likely to be affected by the compromise or arrangement.

During the course of meeting the authorized representatives or the authority shall vote in the meeting either themselves or through proxy or by postal ballets to the adoptions of the compromise or arrangements within one month from the date of such receipt of notice, provided that any objections shall be made by persons holding not less than 10% of the shareholding or having outstanding debt amounting to not less than 5% of total outstanding debt as per the latest audited financial statements.

TRIBUNAL ORDER FOR COMPROMISE OR ARRANGEMENT AS PER THE ACT

Where at a meeting held majority of person representing ¾ in value of creditors or class of creditors or members or class of members as the case may be voting in person or by proxy or postal ballet agree to any compromise or arrangement and such compromise or arrangement if sanctioned by the tribunal by an order then the same shall be binding on the company and it will be applicable to all creditors and members as well as on liquidators of the company.

THE FOLLOWING ARE THE PARTICULARS NORMALLY STATED IN THE ORDER

1) If the compromise or arrangement provided for conversion of preference shares into equity shares regarding option either obtain arrears of dividend in cash or to accept equal value of equity shares of the dividend payable.
2) Protection of any class of creditors.
3) If the compromise or arrangements results in variation of the shareholder right.
4) If the compromise or arrangement is agreed to by the creditors any proceeding before board for industrial and financial reconstruction (BIFR) as per Sick Industrial Company special provision act 1985.

Compromise or arrangement shall be sanctioned by tribunal subject to the certificate by company's auditor has been filled with tribunal to the effect that the accounting treatment of this effects.

The company filed the order of tribunal with the Registrar within a period of 30 days of the receipt of the order if any aggrieved party may can application to the tribunal in the event of any grievances with respect to the takeover offer of the companies other than listed company in such a manner as may be prescribed and the tribunal may on application, pass such order as it may deemed fit.

POWER OF TRIBUNAL TO ENFORCE COMPROMISE OR ARRANGEMENT

As per section 231 of companies Act 2013 the power to the tribunal given to enforce compromise or arrangement as per this section the tribunal makes an order to enforcement compromise or arrangement in respect of the company.

1) Shall have power to supervise the implementation of the compromise or arrangement and
2) May at the time of making such order or at any time, thereafter, give such direction in regard to any matter or make such modification in the compromise or arrangement as it may consider necessary for the proper implementation of the compromise or arrangement.

If the tribunal is satisfied that the compromise or arrangement sanctioned under section 230 cannot be implemented satisfactorily with or without modifications and the company is unable to pay its debts as per the scheme, then the tribunal may make an order for winding up of company.

CONCLUSIONS

1) Companies Act 2013, section 230 had given the detail procedure for the compromise or arrangement with the creditors, shareholders or debenture holders of the company.
2) The proper application for compromise or arrangement must be filled to the tribunal by shareholder, debenture holder and creditors.
3) In the meeting called by tribunal for compromise or arrangement the shareholders. Creditors shall vote against or in favor for the event.
4) The compromise or arrangement shall be sanctioned by the tribunal with majority of voting results.
5) The tribunal must be satisfied with the compromise or arrangement regarding the execution procedure accepted by the company.
6) As per Accounting standard all rearrangement shall be made by companies for compromise or arrangement with the proper certification of company's auditor.
7) The tribunal may issue winding up of company order if they satisfied that company is unable to pay their debts as per scheme with or without modifications of compromise or arrangement.

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DO'S AND DON'TS IN THE CAPITAL MARKET & ITS IMPACT ON RETAIL INVESTORS

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ABSTRACT
Capital market is essential for the development and growth of any economy. A strong and lively capital market helps in corporate sector initiatives, finances and exploits new processes and instruments. However, many of the retail investors do not possess enough knowledge to take informed decisions. They are not even aware of the basics of capital market as well as complete risk- profile of the companies they are putting their hard-earned money. In India, over the past two decades many small investors have lost their hard-earned savings by ignorantly placing their trust in companies promoted by unscrupulous promoters. In addition to the risks inherent in most investment channel and products, the small investor faces the added risk of falling prey to a financial perpetrator–and scamsters. The regulator viz. SEBI, and stock exchanges like BSE, NSE strives to create intensive awareness among the retail investors. This paper is an attempt to analyze Do's and Don'ts in the Capital Market and its Impact on the Retail Investors"

Keywords: SEBI, BSE, NSE, RBI, SCMRD, DIS, DP, DEMAT

INTRODUCTION
Capital market is essential for the development and growth of any economy. Retail investors are the lifeline of any capital market across the globe. However, many of the retail investors do not possess enough knowledge to take informed decisions. They are not even aware of the basics of capital market as well as complete risk-profile of the companies they are putting their hard-earned money. In India, over the past two decades many small investors have lost their hard-earned savings by ignorantly placing their trust in companies promoted by unscrupulous promoters. The small investor faces the added risk of falling prey to a financial perpetrator–and scamsters. The regulator viz. SEBI, and stock exchanges like BSE, NSE strives to create intensive awareness among the retail investors.

REVIEW OF LITERATURE
Black, Barbara (2008) is of the view that policy-makers should view investor education as an important aspect of fairness and the regulator must "encourage and promote informed investment decision-making" as one of the main goals. According to author, it is unfair treatment if investors participate in markets about which they lack the necessary and adequate education.

Lee Hsien Loong (2000) emphasized upon the importance of rebuilding investor confidence through investor education for prosperity of ASEAN Countries.

Hall (2002) has conducted research on broker's recommendations. He found that investors who invested in the Johannesburg securities Exchange (JSE) based on their brokers‟ advice, were able to get risk adjusted returns superior or equal to the market.

Rai (2010) claims that there is need to increase the retail investors' participation, and this could be done by increasing the financial literacy and awareness, expanding the number of issues, providing diverse investment options, training and increasing the reach of intermediaries, enhancing investor protection measures, simplified norms and cost-effective services.

OBJECTIVES OF THE STUDY
1. To Expand outreach of financial services and products.
2. To Reduce investors vulnerability to fraudulent schemes.
3. To Inform financial and retirement planning.
4. To Protect investors by educating them about their rights.

RESEARCH METHODOLOGY
The study is purely based on secondary sources of data. For this, reports of published literature in the form of reports of RBI Bulletin, SEBI, BSE, NSE etc. are used also books and articles from journals, business magazines, newspapers, websites, etc. is being used to gather the data.

LIMITATIONS OF THE STUDY
The behavior of retail investors towards capital market may change from one to another due to demographic and geographical factors such as income, age, education, sex, culture, employment status etc.

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SIGNIFICANCE OF INVESTOR EDUCATION

There is a need to educate the retail investors about the basics of stock market operating in India. This will help to raise more and more funds for the corporate sector in form of capital at cheaper rates at the same time capital market being highly paid avenue of investment will increase the revenue and earning capacity of retail investors which would raise their standard of living.

FREQUENTLY PRESCRIBED DOS AND DON'TS

The details of some of the commonly prescribed DO's and DON'Ts for retail Investors in capital market by different regulatory bodies viz. Securities and Exchange Board of India (SEBI), National Stock Exchange (NSE), Bombay Stock Exchange (BSE) are as follows :

DOS

- Transact only through Stock Exchanges.
- Deal only through SEBI registered intermediaries.
- Complete all the required formalities of opening an account properly.
- Ask for and sign "Know Your Client Agreement".
- Read and properly understand the risks associated with investing in securities/derivatives before undertaking transactions.
- Assess the risk – return profile of the investment as well as the liquidity and safety aspects before making investment decision.
- Ask all relevant questions and clear doubts with broker before transact.
- Invest based on sound reasoning after taking into account all publicly available information and on fundamentals.
- Keep copies of all investment documentation.
- Participate and vote in general meetings either personally or through proxy.
- In case of complaints approach the right authorities for redressal in a timely manner.

DON'TS

- Don't undertake off-market transactions in securities.
- Don't deal with unregistered intermediaries.
- Don't fall prey to promises of unrealistic returns.
- Don't invest on the basis of hearsay and rumors; verify before investment.
- Don't be influenced into buying into fundamentally unsound companies (penny stocks) based on sudden spurts in trading volumes or prices or non-authentic favorable looking articles / stories.
- Don't follow the herd or play on momentum - it could turn against you.

FINDINGS OF THE STUDY

Despite of aforesaid categorical Dos and Don'ts Investors tempt to indulge in following don'ts out of greed and gullibility and eventually end up in following peril:

- ✓ Take risky bets without full knowledge.
- ✓ Try to time the market.
- ✓ Take leverage.
- ✓ Mix emotions with money.
- ✓ Get greedy and carried away with initial gains.
- ✓ Not aware of rights and responsibilities.
- ✓ Misled by rumors circulating in the market.
- ✓ Do fall prey to promises of unrealistic returns.
- ✓ Do invest on the basis of hearsay and rumors; verify before investment.

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RECOMMENDATIONS:

- There should be easy and precise Do’s and Don’ts as too many cooks spoil the broth.
- Intensive awareness program should be undertaken made through various forums about such precise Do’s and Don’ts.

CONCLUSION

In stock market incomplete information leads to bad return whereas perfection and alertness leads to good and stable return. Steps taken by the government, SEBI, BSE, NSE, RBI etc. has certainly given the direction as well as motivation to investor to invest more and more in capital market which has definitely improved the growth of Indian economy. Future of stock market is found very bright in upcoming years due to competitive strength. Therefore, more and immediate attention is to be given on creating intensive retail investor education through various programs and initiatives by concern authorities which would act as a booster to a stock market and overall economy.

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FORENSIC ACCOUNTING: A TOOL FOR DETECTING BANKING FRAUD

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ABSTRACT

Forensic Accounting is an integration of accounting, auditing and investigative skills used by forensic accountant which is suitable for the court and will be a basis of discussion, debate and ultimately dispute resolution. Before the Enron Scam, Rajat Gupta case and Satyam case, there was very little knowledge about forensic accounting in India. Media highlighted the irregularities of the Satyam case and need for hiring forensic accountant arose. But even today the number of forensic accountant in India is still very low. Banking industry is growing very rapidly and the fraudsters are also using innovative methods do fraud. The banking industry seems to have a weak control on the fraud, many tools are available to detect and prevent frauds. Thus forensic accounting gained importance in India but awareness about it is yet to be created amongst the regulatory authority of India. Very few chartered accountant firms in India have a separate practice for fraud examination. Banks cannot give a 100% security to the people but it can take steps towards preventing the frauds. Technology being the major cause, it is like a two sides of the coin. At one side it has brought digitalisation in the banking industry, which has made all banking transaction very easy. On the other hand technology has given arise to many online banking frauds which can be prevented by banks. The banks need to educate their employees and customers. The study is majorly focussing on the role of forensic accountant in curbing crime in banking industry and creating awareness amongst the citizens. The increasing importance and need of forensic accounting industry and its awareness in India is also focused.

Keywords: Forensic Accounting, Fraud, Fraud detection, Banking fraud, Technology in banking system.

14.INTRODUCTION

Eye-opener Satyam Scam (2009), which was termed to be the biggest financial fraud of the country, highlighted that white collar crimes has increased in India and there were difficulties faced by the law enforcement agencies in uncovering the fraud. Indian organizations felt the urge to have proper investigation of financial frauds and the need for experts in this field aroused. Since then, a growth in the forensic accounting profession was seen and the forensic accounting industry gained a lot of importance in India. Even the KPMG Fraud Survey stated that white collar crimes in Indian corporates have increased which made detecting and investigating fraud difficult. The technology is increasing day by day and financial crimes are also increasing at a faster pace. So a professional specialized person having the knowledge of accounting, auditing and investigative skills which focuses on detecting or preventing fraud is required.

According to the Webster's Dictionary 'Forensic' means Belonging to, used in or suitable to courts of judicature or to public discussion and debate. On the other hand the integration of accounting, auditing and investigative skills yields the specialty known as Forensic Accounting. "Forensic accounting", provides an accounting analysis that is suitable to the court which will form the basis for discussion, debate and ultimately dispute resolution.

Forensic accounting encompasses both *Litigation Support* and *Investigative Accounting*. Forensic Accountants utilize accounting, auditing and investigative skills while conducting investigation. Equally required is the ability to respond immediately and to communicate financial information clearly and concisely in a courtroom setting. Forensic Accountants are trained to look beyond the numbers and deal with business reality. Before the Enron Scam, Rajat Gupta case and Satyam Scam, there was a little knowledge about forensic accounting in India. Media highlighted the irregularities of the Satyam case and need for hiring forensic accountant arose but even today the number of forensic accountants in India is still very low. The forensic accounting industry has gained importance over the years but awareness about the forensic accounting is yet to be created amongst the regulatory authorities in India. Very few chartered accountant firms in India have a separate practice for fraud examination. In India there are four big consultancy firms who provide this service, such as Deloitte, KPMG, Price Water House Coopers and Ernst and Young. The formation of Serious Fraud Investigation Office is the landmark creation for the Forensic Accountants. The occurrence of fraud and irregularities in maintaining accounts necessitated proper investigation and preventive environment.

Banking industry in India is growing very rapidly and the fraud is also increasing at a much faster pace. The fraudsters are using innovative methods with the help of new technologies. Banks cannot give 100% security to the people, the banking industry lacks in training its employees and lack of internal control. Technological advancements have brought the banks and the consumers close but on the other hand the technology has also brought a fear due to online frauds. Fraud is on the rise and a rapid increase is seen in the past few years. There are five types of fraud which have been experienced by the banking sector in past 2-3 years. These are (i) diversion of funds, (ii) fraudulent documentation, (iii) ATM fraud, (iv) overvaluation and (v) cybercrime. The banks has to put more stress on the internal auditors for fraud fighting, new mechanisms and techniques has to be used.

Thus, the study aims on determining the prospects of forensic accounting in India and problems faced by citizens due to increased banking frauds. The increasing importance and need of forensic accounting industry, awareness in India is also focused.

15.OBJECTIVES OF THE STUDY

The present study proposes to study the forensic accounting industry in India. It will help in understanding a general overview of forensic accounting to be used as a tool for fraud detection in Greater Mumbai. The study will determine the challenges faced by citizens due to increased banking frauds. The objectives of the study are:

1. To explore the present status of forensic accounting industry in India.
2. To study the problems faced by citizens due to increased banking fraud.
3. To suggest suitable measures to the stakeholders.

16.SIGNIFICANCE OF THE STUDY

Forensic accounting is a legal term which deals with application of accounting techniques and concepts in issues related to legal matters. Forensic accounting is important for the corporates, shareholders, regulatory authorities etc. to deal with the increasing rate of white-collar crimes including financial frauds, embezzlement and other financial wrong doings like money laundering, bankruptcy etc. it helps in investigating the fraud and helps the corporates to clear the fraudsters.

The poor corporate governance, mismanagement, frauds and other wrong doings has led to corporate failure and have placed a great responsibility on forensic accountant. Forensic accounting is required to minimize the financial frauds in order to improve the image of the corporates. The increase in technology has given a great boost to the corporate crimes, which has put a pressure on the accountants to identify the evidence of financial abuses.

This study will help to provide some indications to the stakeholders on the availability of skills required to practice forensic accounting. The study will also help in determining an overview of forensic accounting industry in India and will give an insight to the government, corporates, academicians and regulatory authorities.

17.HYPOTHESES OF THE STUDY

From the above cited objectives, the following hypotheses were proposed by the researcher.

1. There is low level of awareness amongst the citizen about forensic accounting.
2. Forensic accounting easily detects banking frauds.

5. REVIEW OF LITERATURE

1. Anitha. S, Salomi. S and Manjula. B conducted a study on “Impact of Forensic Accounting and Audit in Detecting Fraud” which majorly focused on the impact on forensic accounting and the challenges faced by the nation. The study discussed the importance of forensic accounting and efficient anti forensic strategies. According to the researchers there is need to prevent frauds and white collar crimes in the organizations. Forensic accounting has become an important tool in prevention of frauds, which can be developed with cooperation and technological reinforcement.
2. Vadhrya. K conducted a study on “Financial Frauds and Forensic Accounting in India” discussed about various financial frauds in India and other countries. The frauds included the Satyam Scam (2009), Shradha Chit Fund Scam (2013), Enron Collapse, WorldCom Scam (2002) etc. The researcher discussed about the various techniques of forensic accounting and stated that forensic accounting is growing rapidly as a profession in the world. Forensic Accounting will give tremendous potential to Indian Chartered Accountants in preventing financial frauds and also investigate the fraud.

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6. RESEARCH METHODOLOGY

The researcher proposes to study prospects of forensic accounting in India and problems faced by citizens due to increased banking frauds. For the purpose of the study both primary as well as secondary data will be utilized according to the objectives of the study to arrive at particular inferences. Data analysis will be done by using statistical tools to draw suitable conclusions and suggestions.

6.1 SOURCES OF DATA

a. Primary Data: - Primary data is reliable and based on actual survey. The exact information and current situation will be obtained using descriptive approach of research. The present study will be conducted by interacting with the industry professionals and scheduled interview will be taken. A **well – structured questionnaire** was prepared for collecting information from citizens and industry professionals. The total population of Mumbai is 1.84 crores which makes the universe very big. Therefore, random sampling method will used for data collection. For the purpose of the study the samples will be taken from Greater Mumbai area only and the **sample size** will be **100**.

b. Secondary Data: - Secondary data is one type of quantitative data that has already been collected by someone else for a different purpose to yours. The secondary source of data collection will be taken from different sources like reference books, journals, professional magazines, paper publications, newspaper articles and electronic delivered information. Some published and unpublished data on forensic accounting industry will also be referred to develop information related to forensic accounting in corporate world.

7. DATA ANALYSIS ON FORENSIC ACCOUNTING IN DETECTING BANKING FRAUDS

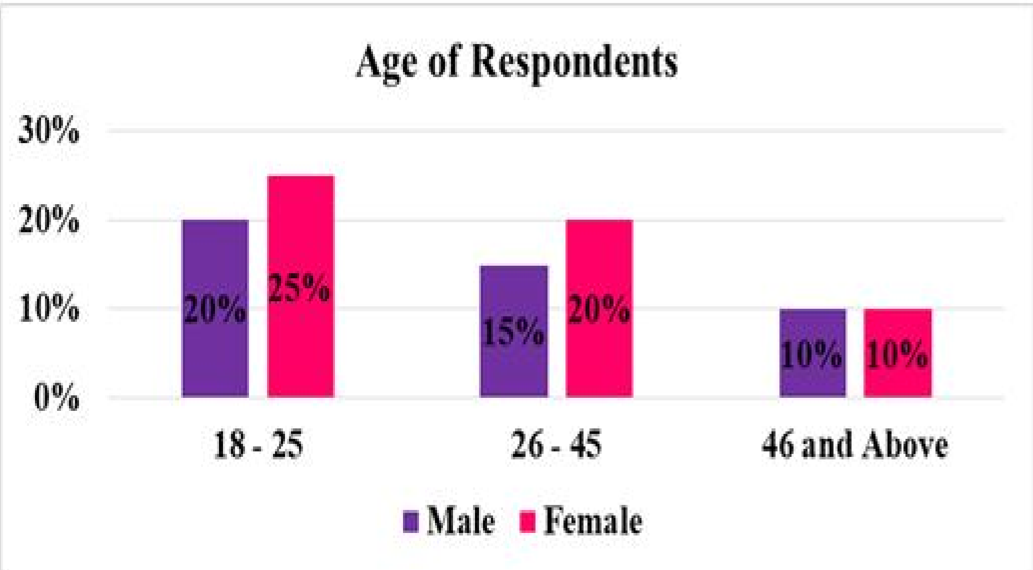
For the purpose of the proposed study the collected data is processed, classified and analyzed to draw a proper conclusion for research by using appropriate statistical tools. The other tools used for presentation of data is tables, diagrams using line, bar, column, doughnut graphs and pie diagram.

1. Age of Respondents

The age profile of respondents plays an important role in the research. The age of respondents were divided into three categories.

Age	Male Percentage	Female Percentage	Total Percentage
18 – 25	20	25	**45**
26 – 45	15	20	**35**
46 and Above	10	10	**20**
Total	**45**	**55**	**100**

Table-1: Age of Respondents, Source: Compiled from Primary Data



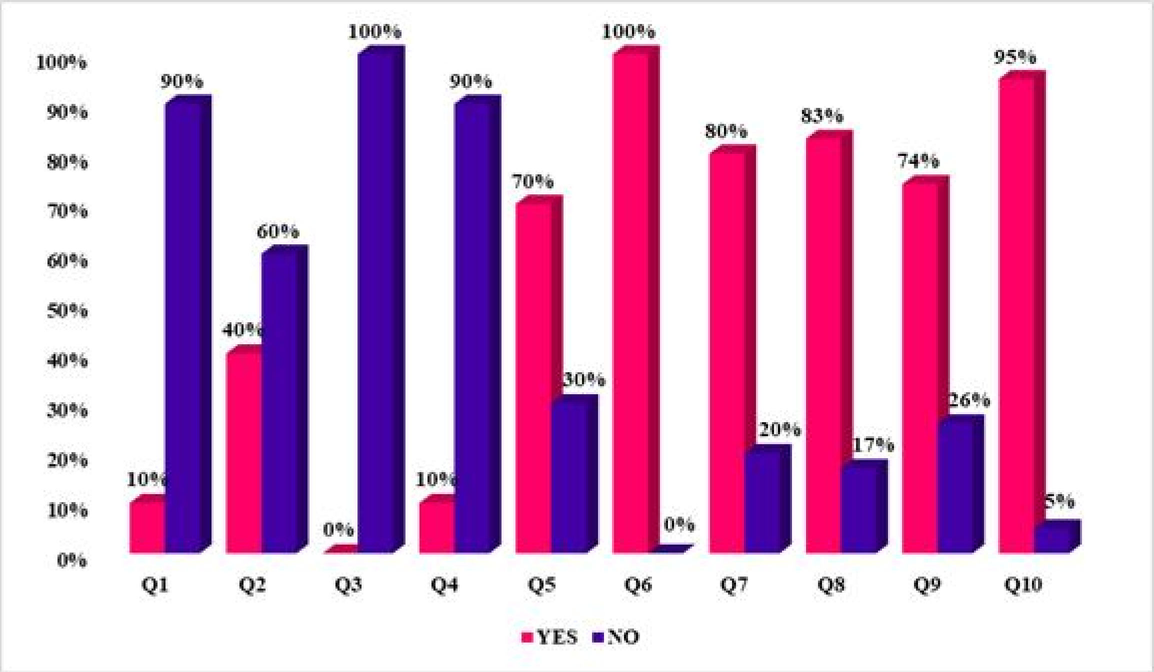
The respondents were divided into various groups to mainly know the awareness and problems of different age group towards banking frauds and forensic accounting.

2. Awareness of citizens towards forensic accounting and banking frauds.

To know the level of awareness of citizens various questions were asked. The results are presented in table 2.

Ques. No.	Statements	Yes (Percentage)	No (Percentage)
Q1	Awareness regarding Forensic Accounting	**10**	**90**
Q2	Awareness regarding Banking Frauds	**40**	**60**
Q3	Awareness about companies who does banking survey related to frauds	**0**	**100**
Q4	Awareness regarding Forensic Accounting used to detect banking frauds	**10**	**90**
Q5	Less security in online transactions	**70**	**30**
Q6	Banking frauds have increased over the years	**100**	**0**
Q7	Do not use card due to fear of cyber crime	**80**	**20**
Q8	Most of the banks do not proper tools to detect fraud	**83**	**17**
Q9	New technology has made fraud detection difficult	**74**	**26**
Q10	Linking of Aadhar to bank accounts have increased the cybercrime	**95**	**5**

Table-2: Awareness of Citizens, Source: Compiled from Primary Data



8. TESTING OF HYPOTHESIS

1. The stated hypothesis **"There is low level of awareness amongst the citizen about forensic accounting"** is accepted on the basis of Table No. 2 from Q1, Q3 and Q4. There is lack of awareness amongst the citizens about forensic accounting. The citizens faced a lot of problems as seen in the result and the main reason for which is lack of awareness and the respondents didn't knew about the reason behind the banking frauds and it can detected.

2. The stated hypothesis **"Forensic accounting easily detects banking frauds" is accepted** on the basis of Table No. 2. It can be clearly seen that if the banks use proper detection tools the frauds can be prevented. And forensic accounting is a tool which can detect frauds which an auditor is unable to detect.

9. FINDINGS OF THE STUDY

After the analysis and testing of hypothesis it can be clearly seen that the citizens lack awareness about the frauds and they are unware about the tools used by banks for detecting frauds. The cost of transaction and the fear of not being safe also poses a problem for them. It was found in the research that the age of the respondents also poses a problem because the elder age group faced a lot of problem, they are not very techno savvy and didn't find the digital payment very convenient. It can be stated that banks need to be alert and try to detect and prevent frauds.

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10. SUGGESTIONS

From the research conducted by the researcher to know the awareness level of the citizens regarding forensic accounting as a tool for detecting banking frauds and the problems faced by them the researcher has drawn the following suggestions:

1. The bank managers and senior officials should assess the fraud risk and also monitor the fraud detection systems used by their banks.
2. Though we have a cyber-crime department and it is functioning very well but a trust needs to be build up amongst the citizens towards electronic payment system.
3. The regulators need to be on their toes and keep an eye on any restrictive practices implemented by banks to maintain their dominance in the banking business.
4. Awareness campaign has to be done at all the places all over India because if urban citizens are not much aware about the digital banking transactions and the benefits of using card then what can be stated about the rural people.
5. The government can include forensic accounting in the curriculum so that even the students are aware and opt for this course. According to the present status very few chartered accountant firms provides forensic accounting services.

11. CONCLUSION

Forensic accounting act as a tool for detecting banking frauds. Forensic accounting will help the organisations to stop corruption and fraud which will result in growth. RBI has the guideline for prevention of fraud and they say that the banks should strengthen their systems. Banks can also use artificial intelligence and other tools which can easily detect frauds. There is an urgent need to stop cybercrime which has created a fear in the minds of the citizens. Forensic accounting will help the banks to bring the trust of the citizens in the banks. Now a days the banking frauds are increasing at a faster pace and according to the research the citizens lack knowledge about banking transaction and the frauds associated with it. The research analysis shows that there is very less trust and awareness amongst the citizens and it has to be regained by the banks with the help of forensic accounting. The study depicts that forensic accounting has a better future in India as the techniques are being accepted by many banks.

The major concern of the country is to prevent white collar crimes because the citizens need honesty and transparency in financial reporting as they will be the ultimate sufferers. Due to which, forensic accounting has become an effective tool in the process of preventing frauds. Forensic accounting has a tremendous potential as a new area of practice for the Indian Chartered Accountants. A lot more exposure is required to forensic accounting industry to inculcate an ethical behaviour in the organizations.

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SAARC AND REGIONAL TRADE INTEGRATION IN SOUTH ASIA

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ABSTRACT
Asian countries have been working in the direction of regional cooperation for a couple of decades. These efforts have given birth to trade agreements which constitute a fragment of the much wider aspect that is regional cooperation. The paper attempts to analyse the effect of trade agreements on regional trade and cooperation in South Asia with selected indicators. During the post World War II period, world trading arrangements pushed for trade free from protectionism with new rules of negotiation which evolved in the form of General Agreements on Tariffs and Trade (GATT) and General Agreements on Trade in Services (GATS). Later these rules became integral part of World Trade Organisation (WTO). These rules had provisions for cooperation between countries leading to the promotion of North-South Cooperation which transformed into South-South Cooperation. This further led to the establishment of regional trading blocs in terms of Customs Union, Economic Union and Political Union. The processes of regional cooperation and regional integration have close relations with the process of bilateral trade and economic interactions based on preferential treatment of partners which are in most of the cases neighboring nations.

Keywords: Trade; Trade Agreements; Economic Unions; South Asia; SAARC; GATTS; GATS

I. INTRODUCTION: AN OVERVIEW OF THE INTRA-REGIONAL TRADE SHARE

In terms of location international trade can be either intra-regional or extra-regional. Intra-regional trade refers to the one in which both the trading partners belong to the same region; while extra-regional trade takes place when the partners are from different regions. The intra-regional trade, including both import and export is quite often measured using the parameter of intra regional trade share.

This intra-regional trade share may, however, sometimes give deceptive results particularly when comparing different regions. This is because such an analysis may be biased by the number of countries in each region and their dimensions. In any particular region, the more the number countries in the region, higher will be the intra-regional trade share. Thus, a region split in higher number of countries will exhibit significant rise in the intra-regional trade share as certain domestic exchange will hence be converted into international that is, intra-regional exchange. It can further be stated that *ceteris paribus*, a region with larger number of countries would show a higher level of trade share as compared to another one total trade size but with a smaller number of countries. In the case of South Asia, the number of member countries is small which also indicates that there is low share of intra-regional trade in SAARC's world trade.

Another very important and obvious issue faced in this regard requires the understanding of geographic neutrality of trade flows, also termed as absence of preferential directions. The concept expresses that the geographic distribution of trade in a region is considered neutral if the share of every partner in the regional trade equals their respective share in the world trade. In certain cases, however, one or more trading partner may enjoy a gainful position in trade with a particular country retaining to factors such as common borders or regional integration agreements, which bring about a preferential inclination towards a country in trade flows. With the assumption of geographic neutrality, it can well be stated that *ceteris paribus*, larger regions (in terms of area) would exhibit a higher intra-regional trade share pertaining to their greater size, independent of the actual intra-regional trade intensity.

II. INTRA-REGIONAL TRADE INTENSITY INDEX IN SAARC REGION

It can nevertheless be explained why an increase in the intra-regional trade share of a single region does not essentially entail a higher inward orientation of trade flows. It may simply indicate a growth in the region's relative share in the world trade. That is, *ceteris paribus,* the intra-regional trade share of a particular region depends to a large extent on the pro-cyclical distortion of the region. Brown (1949) made use of the trade intensity index to deal with such an issue: which was later elaborated by Kojima (1964). To be stated very plainly, for particular region, its intra-regional trade intensity index equals the ratio between the intra-regional trade share and the share of the region in world trade. This index can demonstrate how countries in a region are trading with member countries. However, to elaborate more the index needs to be examined in bilateral form.

The bilateral index can be calculated as:

$$\mathbf{Tij = (t_{ij} / T_{iw}) / (T_{iw} / T_{ww})}$$

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Where,

T_{ij} = *Intra Industry Index of Country I to country j*

t_{ij} = *export plus import from country i to country j*

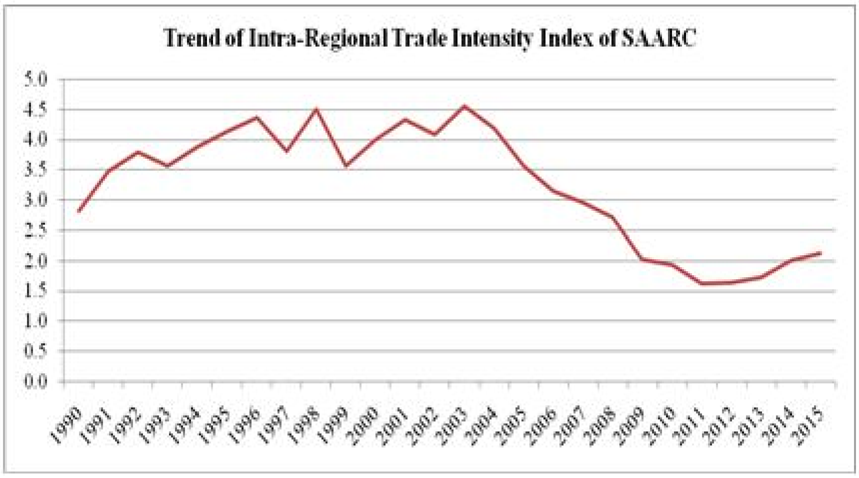
T_{iw} = *Total trade of country i to the world.*

T_{ww} = *World Trade*

The index mentioned above clearly shows evidence of geographic neutrality. As can be seen the index equals one if the weight of the region share in its own trade equals its weight in the world trade. On the other hand, the intra-regional trade intensity index is more than one of the intra-regional trade is comparatively more important that trade with rest of the world. The concept expressed here can very well be considered as an alternate to the prominent index of revealed comparative advantages coined by Balassa (1965) during his study on trade specialization patterns. Trade by region is said to be specialized (i.e. relatively more inclined towards its member countries than towards rest of the world) if the intra-regional trade intensity is greater than one for the region

As per the estimates by Asian Development Bank's Regional Economic Integration Department, regional trade intensity index of SAARC has not been increasing over the period of time. The data rather shows that the index of SAARC started decreasing after 2003 which started increasing during recent years particularly after 2011 (Figure 1).

Figure-1: Trend of Intra-Regional Trade Intensity Index of SAARC



Source: ADB, Regional Trade Integration Centre Database, Accessed in February, 2018

Figure 1 clearly indicates that the index has most often been low and declining for the region. The regional arrangements such as SAARC, agreements like SAFTA and certain bilateral agreements have brought about some degree of integration in the region but trade connectivity is still below what is necessary to unlock the region's potential for prosperity.

Table-1: Intra-Regional Trade Intensity Index of SAARC Countries with Each Other, 2016

	Intensity Index							
Country	**Afghanistan**	**Bangladesh**	**Bhutan**	**India**	**Maldives**	**Nepal**	**Pakistan**	**Sri Lanka**
Afghanistan	-	1.96	0.00	241.03	0.07	0.00	932.93	1.37
Bangladesh	0.02	-	0.22	32.68	0.03	0.02	4.21	0.71
Bhutan	-	432.01	-	20344.00	0.11	170.89	0.03	0.64
India	0.06	0.53	0.04	-	0.02	0.41	0.17	0.40
Maldives	0.02	21.24	0.00	1725.60	-	0.17	36.53	925.15
Nepal	5.66	19.45	2.81	2721.82	0.00	-	2.31	1.41
Pakistan	12.21	4.95	0.00	13.98	0.09	0.01	-	2.20
Sri Lanka	0.02	5.25	0.00	162.31	6.75	0.05	13.13	-

Source: Calculated by Author using Database of International Trade Centre, Geneva, Accessed in February, 2018

Note: The indices for Bangladesh and Nepal are calculated for the year 2015 and for Bhutan data is available for 2012.

As per table 1 the trade intensity index of total trade recorded between two partners is highest for Afghanistan and Pakistan, thus making them the strongest pair of trading partners in South Asia. Commodities exported by Afghanistan to Pakistan include carpets and other textile floor coverings, leather and edible fruits. The next highest index is for Bhutan and India which ranks them second in terms of strong trade linkages in the SAARC region. Considering the situation of Bangladesh, its trade relationship with Bhutan, Nepal and Pakistan has lesser intensity. Bhutan however exhibits strong bilateral ties in terms of trade with Bangladesh, India and Nepal; and these countries have trade intensity greater than unity. India being a country oriented towards expansion of international trade has trade intensities greater than unity with all the SAARC member countries and also strong trade partnership with all these countries. It is noteworthy that Maldives has high trade intensity index with both India and Sri Lanka making both these countries strong trading partners for Maldives. Trade relations of Sri Lanka with Bhutan, Nepal and Afghanistan are though not strong or rather may be considered weak. In the context of Nepal, its trade relationship is strong with Bhutan, Bangladesh, India and Pakistan but quite weak with Maldives and Sri Lanka. Nepal enjoys the strongest trade relationship with Bhutan with as the trade intensity index for Nepal is highest with Bhutan in the region. Pakistan experiences strong trade relations with Afghanistan, Bangladesh, Maldives and Sri Lanka but, rather a completely nonexistent trade with rest of the countries in South Asia.

There are a number of factors present in the region to restrict the growth in trade. These factors may be listed as tariff and non-tariff barriers, weak infrastructure, poor awareness among stakeholders, a lack of political will, and low levels of investment. Though tariffs continue to be reduced bilaterally, regionally, and even globally, the burden of non-tariff barriers (NTBs) remains a serious challenge in South Asia. These NTBs are the formal restrictions on trade that array from quotas to sanctions, or they can be administrative bottlenecks, inefficient customs procedures, and standards-compliance hurdles that include everything from strict packaging and sanitary requirements to the mandatory multiple weighing of consignments at borders. The consequences of such policies and practices can be seen in the form of distortion of the regional market, dejection of sensible imports, and economic losses. Such losses are reflected in the import prices on to the consumers.

II. TRADE COMPLEMENTARITY INDEX

Trade complementarity index (TCI) is a measure of the extent to which two countries are *'natural trading partners'* that is, the exports by a particular country superimpose imports of the other country. For example, a trade complementarity index between countries *i* and *j* on the import side (or on the export side), approximates the capability of export supply by *j* to the import demand by *i* on calculation of the extent to which total imports by *i* match the total exports by *j*. This index is one hundred if there exists a perfect correlation between sectoral shares, while it is zero if this correlation is negative.

Trade complementarity index can be calculated based on the following formulae;

TCij = 100 [1-(∑k [mik-xjk]/2)]

Where
mik = *sector k's share in i's total imports from the world and*

xjk = *sector k's share in j's total exports to the world*

Table-2: Trade Complementarity Index in South Asia, 2016

Country	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Afghanistan	-	1.099	1.001	1.784	1.000	1.002	0.763	1.033
Bangladesh	0.966	-	0.878	1.743	0.856	0.966	1.014	0.966
Bhutan	1.002	1.077	-	1.746	1.000	0.987	1.064	1.033
India	2.618	4.798	17.866	-	3.233	33.225	0.630	9.526
Maldives	1.002	1.099	1.001	1.816	-	1.002	1.064	0.997
Nepal	0.932	1.092	0.926	1.757	1.000	-	1.064	1.032
Pakistan	9.480	0.417	1.001	1.767	0.850	0.996	-	0.425
Sri Lanka	0.997	0.976	0.999	1.710	-1.449	0.993	0.994	-

Source: Calculated by Author using Database of International Trade Centre, Geneva, Accessed in February, 2018

Note: The indices for Bangladesh and Nepal are calculated for the year 2015 and for Bhutan data is available for 2012.

Table 2 shows the trade complementarity indices for SAARC countries trading with each other for total trade (including exports and imports). In case of two trading nations, if the number of goods exported by one country equals the number of goods imported by the other country, trade complementarity index is said to be zero. The index is unity (equal to one) if the share of imports by one country corresponds exactly to that of exports by the other country. In case the countries lack a strong complementarity between them, indices have a low value.

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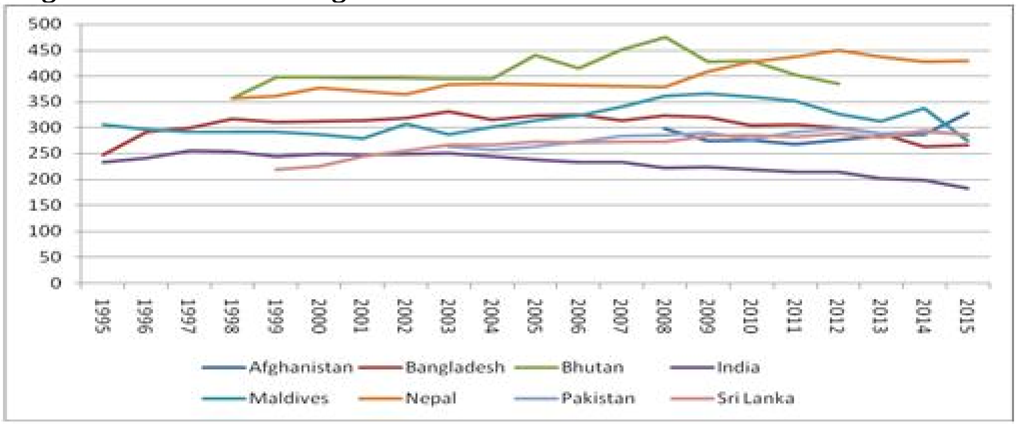
It is noteworthy that the degree of trade complementarity between India and Nepal is higher as compared to other countries in the region (table 2). India's trade complementarity with Bangladesh is high as well. In the region, it is apparent that India has strong trade complementarity with other trading partners specially Nepal, Bangladesh and Bhutan. On the other hand, trade complementarity of Sri Lanka with other partner countries is weak. Bangladesh, Nepal and Maldives have weak trade complementarity with neighbouring countries whereas Pakistan has relatively strong trade complementarity with Afghanistan.

V. TRADE COSTS FOR SAARC COUNTRIES

International trade incurs costs for both the exporting as well as the importing country. Trade costs, broadly defined, include all costs incurred in getting a good to a final user other than the marginal cost of producing the good itself: transportation costs (both freight costs and time costs), policy barriers (tariffs and nontariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, and local distribution costs (wholesale and retail). The costs involved in foreign trade can be classified into two main categories of sources: the first category can be the one including factors entirely bilateral leading to separation between the exporter and the importer. These are exogenous factors such as geographical distance causing international transportation costs; and common features between trading partners such as language, common history, or sharing a common border. The second category consist of endogenous factors such as logistics performance – cost, delay, and reliability – and trade facilitation bottlenecks – such as border control, and transit systems with third countries; international connectivity, such as the existence of regular maritime, air, or terrestrial services; tariffs; and non-tariff measures. With this classification, trade costs to developing economies are much higher than that to developed economies. There are high tariff and non-tariff barriers in the developing countries hindering trade. There are certain other considerable sources of costs which hinder the easy flow trade. These include poor infrastructure and dysfunctional transport and logistics services markets.

South Asia is home to developing economies which have to cope up with almost all the above-mentioned barriers and constraints. These factors also form a reason why the South Asian countries trade more with the rest of the world than with their immediate neighbours in the subcontinent (i.e. the SAARC countries). Due to tariff and non-tariff barriers and other above-mentioned factors, the cost of trading among themselves is much higher for the South Asian countries as compared to that of trading with non-SAARC countries. However, trade is an expensive affair be it intra-regional or with countries outside the region. The cost of trade for the SAARC countries is analysed in terms of average cost of total trade, average trade cost for agricultural products and average trade cost for manufactured goods over the years.

Figure-2: Trend of Average Trade Cost of South Asian Countries -All Products



Source: Calculated by Author using Database of International Trade Centre, Geneva, Accessed in February, 2018

Note: Data for Afghanistan is available from 2008, Bhutan 1998, Nepal from 1998, Pakistan from2003 and for Sri Lanka from1999

The average trade cost for all the products has remained almost stable over years (Figure 2). On a comparative basis, this cost has been higher for Bhutan and Nepal in relation to other countries of the region. Bangladesh and Maldives have experienced a trend of comparatively moderate cost while that has been lower for Sri Lanka, Afghanistan and Pakistan; these three having almost equal costs over the years. Trade costs have been comparatively lower India than the other SAARC countries throughout the period under study. The information here points out a significant fact, the average cost of trading all the products depends to a large extent on the size of the economy in case of the SAARC countries. Larger the size of economy, lesser is the trade costs and vice versa.

VI. CONCLUSION

Economic development in individual countries irrespective of size and the level of growth can be promoted by regional integration potentially. This potential can be subjugated only through a deeper form of cooperation. The significance of regional cooperation is essential to South Asia's development and prosperity. A common regional market has the capability to provide tremendous scope for regional economic development through increasing enormous financial gains by freer trade, more attractive markets for private investment, better use of global investment flows and technology transfers, easier integration with global markets, and reduced cost of supply for all participants. Regional integrations have encouraged trade and economic development in most parts of the world, but lots need to be done in case on SAARC.

The most broadly acknowledged arguments in favor of regional integration are exploitation of economies of scale, international specialization, quantitative and qualitative improvement in output, expansion of employment, improvement in terms of trade, stimulus to foreign investment, increase in economic efficiency, improvement in living standard and technological advancement.

In the world market, products of poor countries are experiencing a tough competition with the products of the rich countries. The poor countries are left with only a single option, i.e. to promote mutual cooperation in order to solve their socio-economic, and politico-ethnic problems and to achieve collective self-reliance. Hence, it is required that South Asia should seriously explore the ways of mutual cooperation and reduce its dependency on the North. SAARC countries have a great scope of regional economic cooperation as they share many common concerns and are facing many problems of similar nature.

Even after completion of 27 years from initiation of SAARC, regional integration in South Asia remains a non-starter. Only one country has successfully expanded the membership of the association since the inception of SAARC in 1985. The story of untapped economic opportunity and a very disproportionate bias towards intra-regional trade and investment is shown by intra-regional data on South Asia. South Asian countries still choose to trade with the more distant economies of the United States and European Union even with the advantages of proximity in trade. The intra-SAARC trade continues to remain lowest among all the major regional groups being less than five percent as compared to 65 percent in EU despite growing trade in SAARC region.

Economic cooperation for all its member countries will prove to be highly beneficial among South Asian Countries. On being able to materialize SAFTA Agreement, South Asia would not only gain economically but it shall be able to establish a more dominant position internationally. Even though there is a slow progress of regional cooperation in South Asia, the actual working of SAARC since its establishments has raised larger hopes of peace. It wouldn't be wrong to say that at present SAARC is far from the stage where EU and ASEAN have reached, yet it cannot be denied that a small beginning has been made in this direction, which would produce far-reaching results in future.

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AN EXPLORATORY RESEARCH ON ENTREPRENEURSHIP SCHEMES AND DEVELOPING POLICY FRAMEWORK

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ABSTRACT
Job creation is the foremost challenge and lifeblood of our economy. With a significant and unique demographic advantage, India, however, has an immense potential to innovate, raise entrepreneurs and create jobs for the benefit of the nation and the world. To guarantee this strong and sustained growth, our country's policies need to benefit entrepreneurs and the investors who support them. This paper includes the study of a wide spectrum of new programmes and opportunities to nurture innovation have been created by the Government of India such as startup India, Digital India, Atal Innovation Mission (AIM), Jan Dhan- Aadhaar- Mobile (JAM), to name a few. This paper also looks at various entrepreneurship policies and provides a framework to policies to support the growth of entrepreneurship.

Keywords: Entrepreneurship, Entrepreneurship policies, schemes, policy framework

INTRODUCTION
Entrepreneurship is very important for growth of the economy. An entrepreneur considered as a very important function of production. Schumpeter defines entrepreneurship, as someone who is innovative. An entrepreneur generally makes new combinations which include the introduction of new goods, new methods of production, opening of new markets, new sources of supply and new organizations. Fukugawa described entrepreneurship to mean the recognition or creation of business opportunities and the exploitation of the opportunities through new firm creation. The entrepreneurship literature acknowledges the individual role in the entrepreneurial process both in developed and developing countries. Any economy cannot grow without entrepreneurship. Economic development is defined as a method of creating wealth by the gathering of human, financial, capital, physical and natural resources to produce marketable goods and services. Shane reported that certain psychological dimensions are vital for effective functioning as an entrepreneur. Some of the attributes include risk taking tendency, differential access to scarce and expensive resources, and leadership quality among others numerous economies globally have given a lot of emphasis to entrepreneurship for their sustainable economic development. Majority of countries across the globe and various governments have developed many programmes, policies and schemes to support, grow and entrepreneurship. Along with a lot of other factors, government schemes are definitely one of the most important facilitator in developing entrepreneurship in a country. Governments of various countries are also showing more interest to attract, encourage, retain and enable entrepreneurs for the growth of the economy.

Entrepreneurs not only help to increase the level of production or services, but help the economy in creating more job opportunities, increase innovation, community development, economic integration, promoting research and development and enhancing the standard of living. Entrepreneurs need capital, technology, infrastructure, guidance and other amenities to start their venture. The government support schemes and policy helps the business incubator for the business incubation. It motivates the entrepreneurs to venture into entrepreneurship. The entrepreneurial policies and schemes support the entrepreneurs with information, education, contacts, capital and other aids to help the entrepreneurs develop. These resources are made available by government to fill gaps that have been identified in entrepreneurship support activities. In early stages of sustainable growth, government also provides incentives, subsidies, tax benefits and other benefits to encourage and support entrepreneurs. Another vital role government have played in near the beginning stages are to develop transportation, power and water facilities and to help launch the sort of capital and money markets in which lenders could have assurance.

When it comes to India, entrepreneurship is an age old concept. In fact to quote from the Indian Industrial Commission Report (1916-1918)–At a time when the West of Europe, the birth place of modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for high artistic skill of her craftsmen. Even at that point, entrepreneurship was developed in the country. Post-independence the main problems faced by the entrepreneurs were lack of mentoring facilities, technology support, infrastructural facilities and availability of credit.

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LITERATURE REVIEW

It has been established that entrepreneurship is a very vital ingredient for job creation as well as economic development. Friedman, B.A. (2011) mentions that success of income generation for the major group in rural as well urban inhabitants without recognized paid job highly depends on entrepreneurship. Minniti, M., (2008) states the integration of relationship between entrepreneurship and economic development has been studied extensively at the local, state and national levels. Kumar and Liu (2005) concluded that entrepreneurial sector contribution to employment and GDP is on the increase. Acs, Z.J., (2004) suggested that governments should take an effort to minimize the constraints on entrepreneurship through support policies as well as infrastructure facilities. Government policy in this context is any course of action which aims at regulating and improving the conditions of SMEs in terms of supportive, implementation and funding policies by the government. Based on this definition, government policy as it relates to entrepreneurial practice is targeted at encouraging entrepreneurship by making a favourable environment for the entrepreneurs. Also, the policies for entrepreneurs should be entrepreneur friendly. Pals (2006) argued that there is a need for government policies as they relate to entrepreneurship to be successfully implemented irrespective of which administration is in power in order to achieve the goals of the guideline which often times is always lacking. Omi E.O. (2002) states that Government of most countries especially developing countries have in the past invested so much efforts and resources in establishing policies intended to uplift entrepreneurship.

Lundstrom and Stevenson (2005) define entrepreneurship policy as measures taken to stimulate entrepreneurship; these policies are not only for entrepreneurs to start their ventures but also focus on the start-up and post-start-up phases of the entrepreneurial process. They are designed and delivered to address the areas of motivation, opportunity and skills; with the primary objective of encouraging more people to start their own businesses.

GEM Report (2002), the government entrepreneurial policies and programs that exist are not effective due to the lack of coordination between the agencies delivering them. The people working for government agencies are not considered to be competent. The result is that those that need help cannot find it. Government policies and programs are inconsistent and not administered efficiently. The legal framework is not effectively enforced. Regulatory requirements are not streamlined and cause a lot of stress to entrepreneurs. The overall assessment of the experts seems to be that entrepreneurial opportunities exist in India, and the people have the entrepreneurial capacity needed to realize the potential of these opportunities. In other words, the individuals and the economy are showing entrepreneurial readiness. Apparently it is society and government which are lagging behind. Social attitudes, lack of finance, inadequate physical infrastructure, and lack of effective government support emerge as the cause of concern. Initiatives for changing the current status of these dimensions can substantially improve the entrepreneurial environment and thereby the levels of entrepreneurial activity in India (GEM Report India, 2002)

According to Markman et al., 2002, the government policies in India regarding small business are too complex to understand and this leads to stifling of the environment for small entrepreneurs. There exists a limited and diversified understanding of factors and the decision process that leads a person towards entrepreneurship. Huetter, 2007 concluded that Entrepreneurship has grown slowly in India because of lack of funding.

Sub National Doing Business Report, ‘Doing business in India 2009’ made a comparative analysis of business regulations across 17 Indian cities. The report focused on local regulations that affect 7 stages in the life of a small or medium size domestic enterprise: starting a business, dealing with construction permits, registering property, paying taxes, trading across borders, enforcing contracts, and closing a business. It found that differences in city and state level regulations as well as the implementation of national level regulations can enhance or constrain local business activity. A number of Indian cities were previously benchmarked by the doing business in south Asia 2007 report. Main findings: in 2009, 14 out of the 17 cities covered in 2007 report introduced local reforms in at least one of the areas measured; reforms produced tangible results, such as reducing the average time to open a business from 54 to 35 days in 10 cities; the time to obtain a building permit was reduced by 25 days on average; doing business was easier in Ludhiana, Hyderabad, and Bhubaneswar but difficult in Kochi and Kolkata.(Doing Business in India ,2009 & The World Bank Group, 2011).

With the above literature review, we can conclude that entrepreneurship is very important for the growth of the economy and it is even more important for the government to frame and implement policies for the growth of entrepreneurship. The government should try to focus on policies which are helpful not only at the incubation process, but even at post start-up phase.

OBJECTIVE

The main objective of this research is to study various government schemes for entrepreneurship development. The research also aims to find out the awareness about these schemes.

METHODOLOGY

The paper is based on secondary research. Government websites and research papers, articles, journals were studies to explore the government schemes and policies for the growth of entrepreneurship.

SCHEMES TO PROMOTE ENTREPRENEURSHIP

The start-up India Scheme

Start-up India Scheme is an initiative of the Indian government, the primary objective is to build a robust eco-system for nurturing innovation and start-ups which will in turn drive sustainable economic growth and generate large scale employment opportunities in India and wealth creation in India. The start-up India scheme includes granting a tax-holiday for three years. The government has provided a fund of Rs.2500 crore for start-ups, as well as a credit guarantee fund of Rs.500 crore rupees. Also, there are many eligibility rules for the scheme, which includes - The company to be formed must be a private limited company or a limited liability partnership, It should be a new firm or not older than five years, and the total turnover of the company should be not exceeding 25 crores, The firms should have obtained the approval from the Department of Industrial Policy and Promotion (DIPP), To get approval from DIPP, the firm should be funded by an Incubation fund, Angel Fund or Private Equity Fund, The firm should have obtained a patron guarantee from the Indian patent and Trademark Office, It must have a recommendation letter by an incubation, Capital gain is exempted from income tax under the start-up India campaign, The firm must provide innovative schemes or products, Angel fund, Incubation fund, Accelerators, Private Equity Fund, Angel network must be registered with SEBI (Securities and Exchange Board of India), Registration on start-up portal can be done only through for the following firms - Partnership Firm, Limited Liability Partnership Firm, Private Limited Company.

Entrepreneurship Policy Framework

Entrepreneurship policy generally addresses motivation, opportunity, and skills of individuals willing to become entrepreneurs, with a primary focus of encouraging them take to entrepreneurship. Not only to start up, but the policies also work as an aid to the entrepreneurs during infancy stage. The purpose of governments' entrepreneurial policy is to address five policy challenges, viz., - promoting the benefits of the entrepreneurship as a career opportunity; to develop an entrepreneurial culture across the state; to encourage as well as provide knowledge to the entrepreneurs about the skillset needed as an entrepreneur; to serve as a help to emerging entrepreneurs become growth entrepreneurs by assisting them with technology, marketing and business development facilities; to support the initial years of entrepreneurial journey by providing the necessary support infrastructure and facilitating financing.

Lundstrom and Stevenson, 2005 suggest that to achieve these objectives, the entrepreneurship policy would focus on the following six policy measures - 1) Entrepreneurship promotion; 2) Entrepreneurship education; 3) Reducing administrative, legislative and regulatory barriers to entry and exit; 4) Start-up and seed financing; 5) Business support for start-ups; and 6) Target group measures. Each of these policies should address different sets of objectives and utilize a range of policy instruments, frameworks and measures. Some of the policy measures adopted by the government are educating the youth during their school and college education about the benefits of entrepreneurship, instituting awards programmes for successful entrepreneurs, profiling the rolemodels, promoting them widely in the mass media, and organizing entrepreneurship events. For this, the government takes the assistance of the media, the education system, the community organization, as well as the business associations, foundations and the private sector.

Entrepreneurship Promotion and Education

A lot of measures are taken by the government to promote entrepreneurship. It starts with entrepreneurship education. Entrepreneurship Education aims to integrate entrepreneurship skills and know-how into the formal education system. It should inculcate entrepreneurship education at school, undergraduate, post graduate as well as doctoral level of studies. This is also done by using successful entrepreneurs as icons. Aiming to increase the opportunity for entrepreneurs, while enhancing their skill levels, Reducing Barriers to entry and exit intends to reduce the time and cost of starting a new business, while also improving opportunity for start-ups to grow and access resources. It also tries to reduce the stigma attached with failed ventures, and remove disincentives of working as an employee vis-à-vis becoming an entrepreneur. This last element is a critical item, which pushes entrepreneurial individuals to take up jobs, which in turn gets reflected in the entrepreneurial ecosystem in the country. Governments implement this through policy levers like facilitating single-window registration system; rationalizing the labour and taxation regulations; reviewing competition law, company law, bankruptcy law, intellectual property law, and regulation governing the transfer of business ownership; review and relax administrative burden on start-ups; and implement 'better regulation' of businesses within the economy / industry / country.

Seed Financing
Seed capital financing tries to enhance the opportunity for the entrepreneur by addressing the lack of access to financing, which would impede the venture's existence, stability, expansion, modernization, and growth. This can be done by facilitating loans, venture financing as well as easy and no hassle loans.

Business Support
After the business has start-up, government facilitates the entrepreneurial venture through service centres, which act as one-stop shop for all the needs of managing an enterprise. A web portal, mentor support, entrepreneurial networks, national incubators etc. are the ways in which the government should support start-ups. Government also can conduct and train business consultants who can provide dedicated and holistic consultancy services to enterprises. Government can have different policies for different kind of start-ups.

CONCLUSION
Entrepreneurship policy is definitely a very important tool for sustaining and growing economies. The nation definitely has some very good start up schemes for promotion and development of entrepreneurship which includes start-up India, Make in India, Support to training and employment, Jan-Dhan-Adhar Mobile to name a few. Also, the government is taking correct measures to educate and motivate people to choose up entrepreneurship. The government should focus on developing specific policies for seed capital as well as business support. The policies should be different for different types of venture.

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A NEW INSIGHT INTO REORGANIZATION IN AVIATION SECTOR WITH SPECIAL REFERENCE TO GREEN AIRPORTS IN INDIA

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1. ABSTRACT
The need for reorganizing into Green Airports are emerging as the earnest eco-requirement of the hour. Research studies states the fact, that not only aircrafts, but airports too are responsible and accountable for carbon emissions in the Aviation Sector. Hence, the Aviation Partners are playing a vital role in implementing environmental sustainability tools to minimize the carbon footprints. As, India is, at its full swing is working towards construction of new Airports as well as revival of old Airports with the inclusion of sustainable measures to head towards a green culture in future. Keeping this mind, an attempt has been made by the researcher to highlight the sustainable eco-system prevailing inside the airport which in turn will lead to transform air travel to air sewa and contribute towards the Green Airports in India.

Keywords: Sustainability, Carbon footprint, Solar power plants, Green materials, Energy efficient technologies, Green energy, Energy-efficient chillers, Envelope, Light Emitting Diodes, Double-insulated roofing systems, Transparent facades, Fly ash bricks and Green Airports.

2. INTRODUCTION
Aviation Sector plays a dominant role in the globalized air travel, thereby flying millions of passengers and delivering tons of cargo daily. Indian Aviation Sector has witnessed a rapid economic growth and thereby gained recognition as one of the fastest growing aviation markets in the globe contributing more than 20 percent per annum. Indian aviation sector provides numerous benefits in form of better infrastructure, attracting more investments, improvement in regional and global connectivity, catering to tourism as well as career advancements.

Even though, all the benefits are available, the total number of domestic passenger tickets sold recently is only 65 million for a population of 1.2 billion inclusive of frequent flyers. The research studies present the fact that less than 3 percent of Indians can afford Air Travel and from which 80 percent belong from the four metro cities of India.

India ranks as a top five fastest growing aviation markets and is all set to achieve 266 million extra passengers per year, to witness a total of 367 million passengers by 2034.While the aviation growth is blooming, the aviation infrastructure expansion will disturb the ecological balance thereby, having a destructive impact on the environment and nature. Indeed, aviation infrastructure development will seriously lead to addition in air, water and noise pollution, landscape deterioration and bio-diversity damage.

To avoid such damage to ecosystem, many aviation partners have adopted the sustainability tool to safeguard the environment. Keeping this mind, India has headed towards construction of new airports as well as revival of old airports. Thus, working towards building Green Airports is not just essential in modern era. But, it is indeed the only permanent sustainable measure to be adopted to be at par with the ever-growing demands placed on the aviation infrastructure in India.

It is an interesting fact to know that Western world's prime airports constructed almost 70 years back, fail to observe sustainability tool and are considered as the worst environmental offenders in world aviation market. It is a sense of pride to state that India scores high as it has recognized the importance of regulating and reducing the eco-system damage and curb down carbon footprint in the aviation sector. Further, civil aviation regulation keeps a constant eye with the support of environmental authorities on aircraft noise, emissions from the aircraft engine to avoid ecological imbalances and environmental issues. Thus, there is heartfelt need to contribute towards building a clean and green airport in India by adopting sustainable eco-system inside the airports and contribute towards the transformation of air travel to air sewa.

3. RESEARCH METHODOLOGY
3.1. Purpose of the Research
The purpose of this research paper is to study the reorganization in Aviation Sector with special reference to Green Airports in India. As, eco- label is gaining prime importance in Aviation Sector too, thus an attempt has been made by the researcher to identify the sustainable eco-system created inside the airport which will help to transform air travel to air sewa as well as to focus on the Green Airports in India.

3.2. Objectives Of The Research

i. To determine the sustainable ecosystem prevailing inside the airports in India.

ii. To transform air travel to air sewa through green culture.

iii. To recognize the Green Airports in India.

3.3. Sampling Design

For the present research study simple random sampling method was adopted. It was essential the sample Airport selected has gained recognition in maintaining sustainable eco-system in India. Hence, a conscious effort was made to determine that the selected Airport Sample was a representative of the Potential Airports in India. A sample of Seven Green Airports was selected from different parts of India. Further, Non-Probability Sampling method known as Convenience Sampling was adopted to acquire firsthand information from Airline Ground Staff Officials as well as Airline Crew Staff of Mumbai who frequently fly to various green airports in India.

3.4. Scope Of The Research

The present research study was restricted to only Green Airports in India. The Green Airports chosen for the research were as follows

i. Cochin International Airport located in Kochi.

ii. Vadodara Airport located in Gujarat.

iii. Rajiv Gandhi International Airport located in Hyderabad.

iv. Indira Gandhi International Airport located in Delhi.

v. Chhatrapati Shivaji International Airport located in Mumbai.

vi. Kempagowda International Airport located in Bengaluru.

vii. Chandigarh International Airport located in Chandigarh.

3.5. Methods Of Data Collection:

The present research study was based on primary as well as secondary data. Primary Data has been collected through personal observations and conversation with Airline Ground Staff Officials of Mumbai as well as Airline Crew Staff of Mumbai who frequently fly to various green airports in India. Further, secondary data was collected through articles and observations from aviation magazines and newspapers.

3.6. Research Design:

The research design deployed was exploratory research design. It was descriptive in nature, since it was used study the sustainable ecosystem prevailing inside the airports in India.

3.7 Limitations of the Research

i. The primary research conducted was restricted to personal observation and conversation with Airline Ground Staff as well as Airline Crew Staff working at Domestic and International Airports located in Mumbai due to physical and economic constraints.

ii. The research was based on only selected Seven Green Airports in India.

3.8. Data Analysis Methods

The firsthand information acquired from personal observation and conversation with the Airline Ground Staff as well as Airline Crew Staff of Mumbai along with the secondary data available from aviation magazines were used to generalize the findings and draw conclusions of the research study. The impact of the sustainable ecosystem prevailing inside the airports has been highlighted in this research to determine the green airports in India.

4. FINDINGS

i. Cochin International Airport, ranked as First Green Airport in India. It has emerged as a global role model as it is the world’s First Solar Powered Airport. This Airport in itself is a global brand as it had fixed a solar photovoltaic plant in August,2015. This plant is able to generate about 60MW of electricity daily. This is adequate for operational needs of the airport and thereby making the airport carbon neutral. It is a silent airport, thereby checking and curbing noise levels. All the green environment initiatives have led to transform air travel to air sewa.

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ii. Vadodara Airport, ranked as Second Green Airport in India. This airport is well equipped with an energy-saving cooling mechanism, super-sensitive fire safety alarm and rainwater harvesting setup. This airport strives to achieve zero discharge, waste to wealth, energy saving and environment friendly. It is regarded as one of the top class airports of India. This airport is built on the core principle of green infrastructure by the usage of fly ash bricks. It is a silent airport, thereby checking and curbing noise levels. All the green culture initiatives have led to transform air travel to air sewa.

iii. Rajiv Gandhi International Airport, Hyderabad has been crowned as the first airport in South India and Second in the country to switched all Taxiway Edge Lights with Light Emitting Diodes (LED's). Further, this airport is on its green movement and has been transformed into 100 percent LED Airport, and thereby recently, being recognized as Carbon Neutral Airport (Level 3 + Neutrality) from Airport Carbon Accreditation. In 2015, To curb carbon footprint, 16000 solar panels or so has been spread over 24 acres of land. It is a silent airport, thereby checking and curbing noise levels. All the green movement has led to transform air travel to air sewa.

iv. The Indira Gandhi International Airport, Delhi has undertaken various sustainable measures to shift the busiest airport of India into a green culture. It has received level 3 Accreditation from Airport Carbon Accreditation in 2013-2014.In 2014, first Solar Power Plant was installed at this airport. Further, this airport has been recognized for green infrastructure and has also registered with Clean Development Mechanism of United Nations Framework Convention On Climate Change. Presently, this airport solar power generation capacity varies from 2.14 MW to 7.84 MW, making it self- reliant on green energy. This airport is operating on green culture using energy – efficient technologies such as chilled –water pipe circuit, solar heating system, solar boundary light system, tempered cooling system, energy-efficient chillers, constructing envelope, energy saving through improved insulation in air supply and reverse air ducts It is a silent airport, thereby checking and curbing noise levels. All the green initiatives have led to transform air travel to air sewa. By 2020, it has planned to generate total solar power capacity to 20 MW(megawatt), as part of green movement.

v. The Chhatrapati Shivaji International Airport, Mumbai has adopted green culture by taking suitable steps to reduce greenhouse gas emissions, water usage, waste generation and energy consumption. It has received level 3 Accreditation from Airport Carbon Accreditation in 2013-2014. It has become the silent airport, thereby checking and curbing noise levels. Recently, this airport has initiated ammonia-feeding bacteria in 200 washrooms and also to clean the surface area at the terminal as the bacteria mixture works for 24 hours. This in turn has helped to observe hygiene at the terminal. All the green efforts has led to transform air travel to air sewa.

vi. Kempagowda International Airport, Bengaluru has received level 3 Accreditation from Airport Carbon Accreditation in 2013-2014. On its way to green movement, this airport has engaged itself in eco-friendly, sustainable and energy–efficient model. It has headed towards reduce, reuse and recycle mission to transform air travel into air sewa by cutting down waste and efficient use of green supply chain management. It is the silent airport, thereby checking and curbing noise levels. Further, in March 2016, solar project was initiated on six rooftops. This airport targeted for 40 percent of their energy usage through this project by 2017 to curb power consumption and carbon footprint and thereby generate savings.

vii. Chandigarh International Airport has been built with the help of green materials such as fly-ash bricks, energy- efficient chillers. Further, double-insulated roofing systems with a motion –sensor plumbing system to reduce water usage. In order to increase the optimum usage of Daylight, transparent facades, roof lights and long-span glass structures have been incorporated. This has led to reduction in the illumination levels and artificial light maintenance and costs. This airport has 200 KW (Kilowatt) rooftop solar plant to meet its energy needs. Further a Sewage Treatment Plant (STP) with a capacity of 600 kiloliters per day has been set up to reuse the contaminated water in washrooms and gardening. It has become a silent airport, thereby checking and curbing noise levels. All the green sustainable efforts have led to transform air travel to air sewa.

5. CONCLUSION

From the findings of the research, it may be concluded that Indian Aviation Sector is showing a rapid growth trend by transforming Air Travel – Air Sewa. Presently, India ranks as the seventh largest player in Aviation Sector in globe and it is on the verge to become the third largest player by 2024.

Thus, it is the earnest need for Indian Aviation Sector to focus not only on growth in aviation markets but also on being more committed towards environment sustainability measures in order to withstand the future growth as well as eco-system challenges and become a part of green movement in order to reorganize all the airports in India to Green Airports in near future.

Hence, reorganizing into Green Airports is the only permanent sustainable tool available to meet the ever increasing demands placed on the aviation infrastructure in India.

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A STUDY ON ONLINE SHOPPING BEHAVIOUR IN RETAIL INDUSTRY IN MUMBAI REGION

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ABSTRACT

This study is conducted to study the behavior of consumer in online mode in Retail industry in Mumbai. This study will empower us to understand the behavior of online shopper in retail industry. The area of research is restricted to some parts of Mumbai.

This research is based on Sampling Method, where the sample size is 100. The age group of the sample includes from 18 years and up to the age of 50. The data analysis is done with the help of pie diagram. The questionnaire included the basic knowledge and preferences of consumer towards online mode and payment structure.

Keywords: Online shopping, Consumer, shopper, Retail Industry

OBJECTIVES

1. To study the online shopping behaviour of consumers in Retail Industry.
2. To identify the problems of shopper in terms of online payment.

RESEARCH METHODOLOGY

This research is based on Sampling Method where the Sampling is based on questionnaire method where various questions are been asked to shopper through Google forms and then the analysis is been done to find out the outcome of this study.

HYPOTHESIS

H1- Online shopping is convenient to the shopper.

H2-Online payment is convenient to the shopper.

INTRODUCTION

As everyone are aware about the DIGITAL INDIA which was launched by our Honorable Prime minister Narendra Modi in the year 2015. The aim of starting Digital India was to make it convenient for the consumer in terms of the online shopping. In today's scenario, Internet has become a buzz in the minds of each and every one in terms of businesses, Economies and societies throughout the world. As the number of Internet user is increasing which gives an indication to all the business houses to do their business in online mode. The internet is playing a vital role in each and every field of human life. Many business houses are globalizing their sales and internet is becoming a means of advertising and selling their products or services globally. They have started creating their pages, applications to understand the requirement of masses in the global market.

Online store now has become one of the top priority method in today's business market .The internet is opened 24*7, with just a tap or clicking mouse button , consumer can get anything from various sources. Online shopping is getting prominent all over the place than before and it's making a great space in the consumer market, and because of this more consumers are fascinating towards online shopping everyday all around the world. Internet is shifting the consumer behaviour toward online shopping too because it is comfortable and consumers can get huge range of variety and can compare the prices easily and it is convenient too.

REVIEW OF LITERATURE

Mohammad Anisur Rahman, .et.al (2018), provides a base for the future researchers in understanding the behavior of the consumers. The variables which are been considered in the study may not be sufficient rather more variables are to be considered. Authors has find out that manager must provide all the information about the product, services, pricing, payment gateway, delivery mode, security etc. Managers must choose social network for advertisement. Managers must maintain the cash on delivery program to build faith in the minds of the customers. To remove the touch and feel concept, managers must send alternative products to the consumers to choose from options and pay after they prefer one and may create a competitive edge in the market. Further, researcher may also consider various factors such as online shopping behavior, customer satisfaction and loyalty.

Dr. R. Selvaraj, S. Nirmala (2017) , conducted study for the consumers buying behavior in online mode .It is playing an important role as compared to offline mode. People are very much convenient in online mode as it is time saving. Both male and female feel the online shopping is very easier and with a reasonable prices. Customers are also aware about the online shopping very well. But online marketers should improve more and more for further growing number of sales.

Upasana Kanchan, et.al ; (2015) has identified the importance of online shopping in Indian market but needs to figure out in some other aspects to make it effective." According to India B2C E-Commerce Report 2013, e-tailing accounts for less than 1 percent of the overall retail market in India in 2012. While it accounts for over 5 percent if the total retail market in China and 10% in the UK and the US". Which states that only a small fraction of internet users in India are currently online shoppers. The reason could be the way customers feel about high-tech purchasing that is holding back the development of the industry (Reda, 1995). Thus it is vital that marketers understand the depth of customer intentions for this medium of retailing. Online shopping is gaining popularity among people of young generation. Higher income groups and educated people are purchasing more via e-retailing websites. Companies build trustworthy relationship between producers and customers.

Choudhury, et.al;. (2014) found that majority of respondents shop online but still the respondents think the reason of not shopping online is due to inability to touch and see the product physically while shopping .Internet literacy has significant relationship on online purchase, thus proper care should be taken to promote internet literacy so as to promote online shopping . it was also found that online product price listing has significant impact on online purchase..The study perceived that online shopping is in satisfactory level among the students of Assam University.

Mr. Pratiksinh Vaghela (2014), has stated the importance of online shopping in current scenario.it indicates the consumer experience of online shopping. As per the study, consumer believes that online shopping is much better than offline mode but having said that they feel that online shopping is expensive and have some delivery issues. Customers most disturbing barrier for online shopping are unable to authenticate product personally, online payment security.

Dr.Gagandeep Nagra, Dr.R Gopal (2013) has tested with ANOVA across demographics factors which shows that gender does impact possession of internet and frequency of online purchase. It proves that the respondents observed online shopping in a positive manner that clearly validates the project growth of online shopping. The frequency of online shopping is relatively less in the country. Online shopping organizations can smear the relevant variables and factors, identified from the research, to create their strategies and tactics. The results can also be used by various organizations to recognize their target customer segments.

DATA COLLECTION AND INTERPRETATION

The two methods of collecting the data have been used such as primary data and secondary data.

Primary data

Primary data is the first hand information that is collected during the period of research. Primary data has been collected through discussion held with the customers who are using online shopping. Some information was gathered through conversation with some respondents.

Secondary data

Secondary data means data already available for the researcher, which is already, exists. According to my study, secondary data is collected with the help of referring books and journals for the study purpose. Some information are gathered and referred with the help of internet browser

Sample Size

Sample size determination is the act of choosing the number of observations or replicates to include in a statistical sample. The sample size is the important feature of any empirical study in which the goal is to make inferences about a population from a sample. For the purpose of the study, researcher has chosen the size of 100 samples for the collection of the data.

Method of Sampling

Under sampling method, the method of random sampling is been used to collect the data from the respondents. Random sampling means, selecting a sample from population in random manner, i.e., every element in the population has an equal probability of choosing samples. There is no restriction in choosing samples from the population

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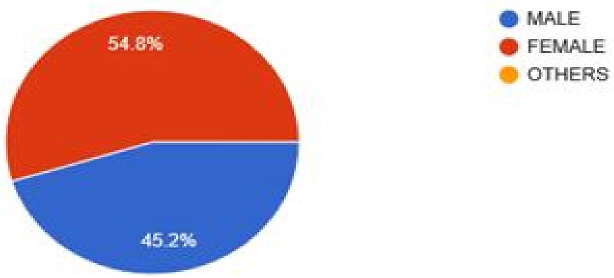
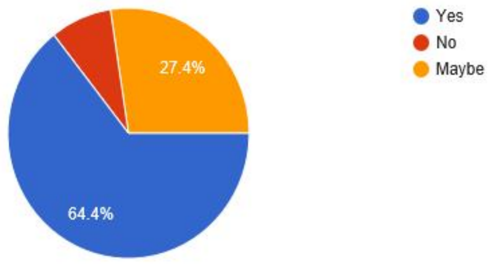
INTERPRETATION

As per the study it states that 54 % comprises of male and rest is female.

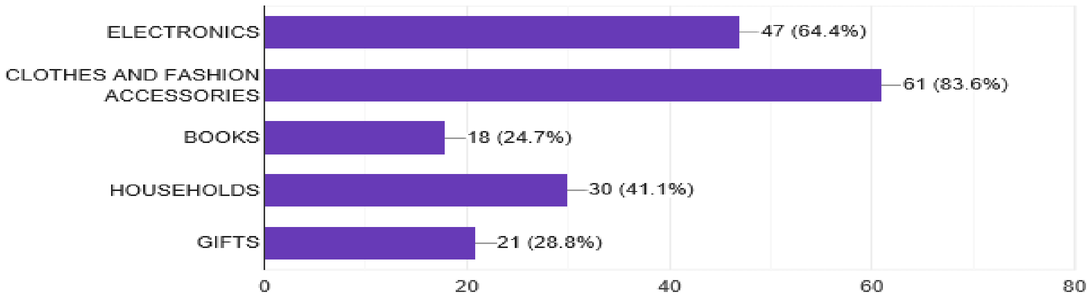
Gender



64% prefer online purchase

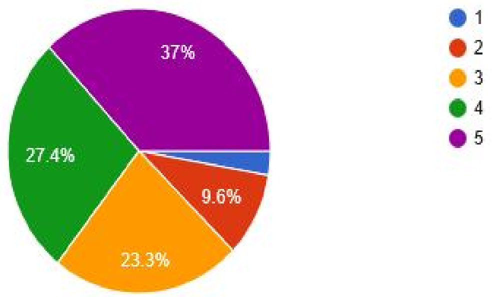


Customers prefer clothes and fashion accessories as compared to others

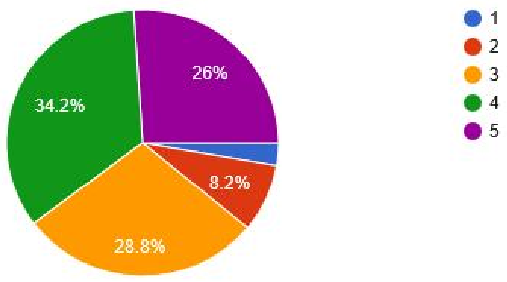


FACTORS CONSIDERED WHILE ONLINE PURCHASE

37% considers varieties while purchasing



34 % wants the online process to be easy



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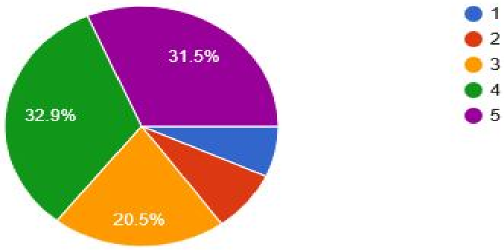
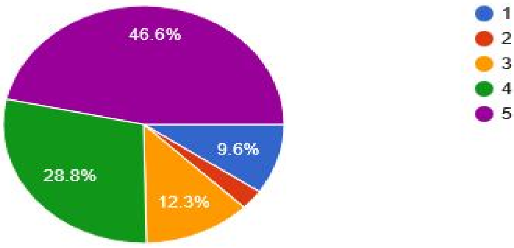
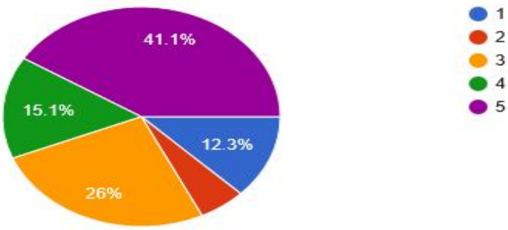
Approx 66% expects special offers & discounts



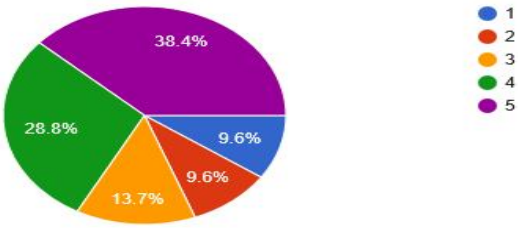
Approx 70% expects ease in refund policy



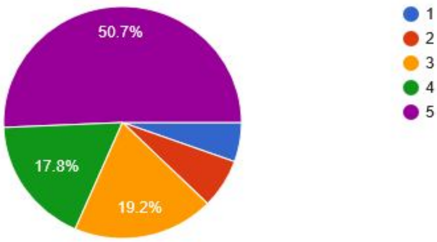
57% wants free shipping



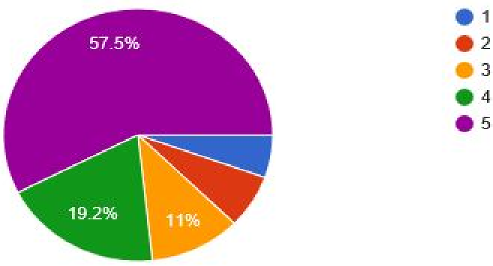
Approx 66 % prefer order tracking process



Approx 50% gurantees and warrantees



Approx 58% wants privacy of information



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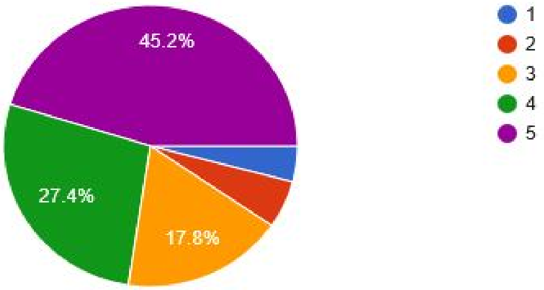
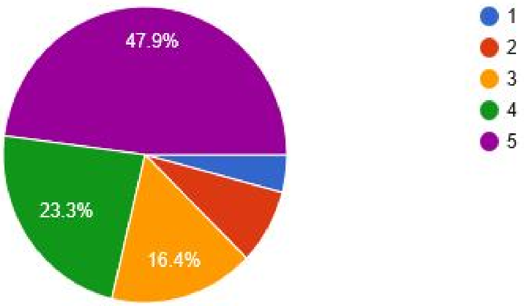
Approx 45% wants detailed product information

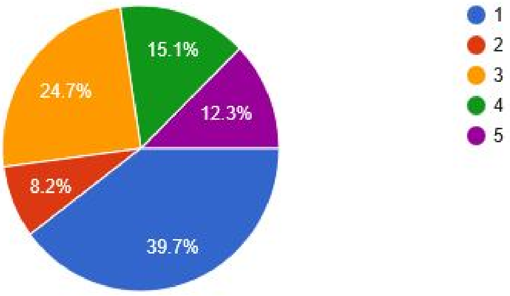


Approx 48% expects proper delivery time and customer service

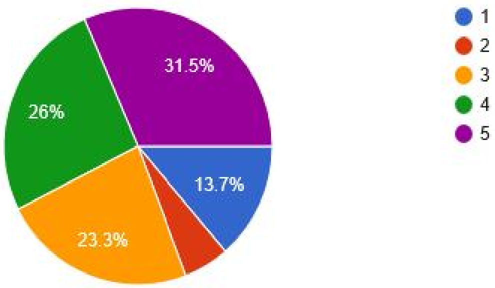


PAYMENT METHOD WHILE SHOPPING GOODS ONLINE

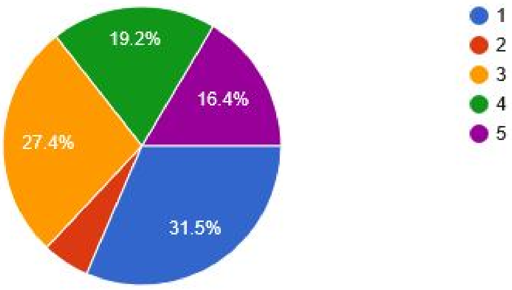
Credit card is not used by many of the customers



Approx 32% prefers debit card/atm card



Approx 32% are not aware of e-wallet



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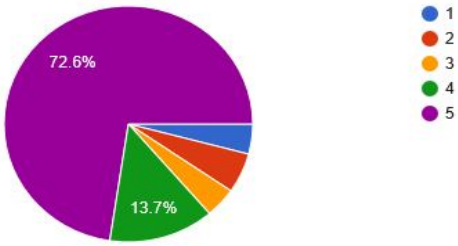
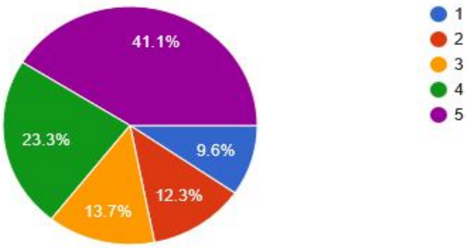
72% prefer cash on delivery



Approx 41% uses card payment on delivery



From above, it states that online shopping is much more convenient as compared to offline shopping so first Hypothesis has been accepted and in terms of online payment it is not so secured and convenient, so second Hypothesis has been rejected.

CONCLUSION

From this research we conclude that in terms of online purchase, customer's wants to purchase more in clothing and fashion accessories products. While purchasing, customer considers various factors such as variety of products, special offers, refund policy, order tracking process, guarantees and warranties, privacy and detailed information. In terms of payment COD and card payment on delivery is very much accepted as compared to credit card, debit card, E-wallet.

LIMITATIONS OF THE STUDY

Due to time, place, money constraints, this study is limited to some selected areas of Mumbai which includes Ghatkopar, Powai, and Kurla.

RECOMMENDATION /SUGGESTIONS

1. Improvement in the services available online.
2. Improving Digital security
3. Improvement in various digital payment.
4. To work on various Technical glitches.
5. To work on ground level in terms of awareness about online payment.

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AN ANALYSIS OF INNOVATION POLICIES IN INDIAN MSME SECTOR

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1. ABSTRACT

The growth of Indian economic growth in recent years is termed to be jobless growth as it has not created much employability to the huge population. With a huge population, India's Growth is expenditure centric where the growth of manufacturing sector is quite negligible. Knowing the importance of the growth of manufacturing sector, Indian Government has already taken the policy initiatives such as Make in India programme. With this also the policy has not shown any dynamic impact. Visualising the importance Innovation, this study focus on various dimensions of innovation activity in India aiming at analyzing the various policy initiatives by the Government on Innovation and providing valuable inputs.

Keywords: MSME, Innovation, Policy

2. INTRODUCTION

The growth of Indian Economy has been identified as more expenditure oriented and is very dependent on peripheral factors, such as monsoons for agriculture and FDI for investments. The status of exports and imports are not quite convincing. Huge expenditure leads to heavy imports and a fragile manufacturing sector ends up with low growth rate of export. The Indian Govermment has realized the situation long back and has come up with the solution to make India as a manufacturing hub to with the help of MSME to make the Indian export sector strong. India gives more importance to MSMEs in the economic and social development of the country because employment potential and the overall growth in the MSME sector is much higher than in the large industries. The government has fulfilled its mission by formulating policies, designing and implementing support measures in the field of credit, technological up gradation, marketing, entrepreneurship development, etc. This has resulted into increasing rate of innovations within the MSME sector and most of the innovations in the MSME segment have been witnessed in these areas. The thrust areas for increasing the competitiveness of MSMEs have included technology (including quality), procurement, skills development and finance. Innovation can manifest in several forms from operational efficiencies and business model optimizations to product- and service-related novelties. Innovation is as much about execution as it is about creativity. The Indian innovation ecosystem is acquiring greater granularity. Innovation in India is increasingly becoming local, with end-use conditions considered at the forefront of the process. This increase in local emphasis is reflected in the availability of an increasing array of products and services. Traditional strengths, such as affordable medicines, have been expanded to underserved markets beyond India. Several of the new innovations—such as the Nano car—have global potential. A growing number of these are affordable innovations across several sectors, namely, medicines and health care, drinking water purifiers, automobiles, IT services, cellular phone services, education, e-governance, and so on. The list is expanding to include education and skills.

3. OBJECTIVE OF THE STUDY

As an emerging investment destination of foreign capital, technology and products, there is a strong need for an innovation strategy to give a competitive edge to the domestic industries and help them compete in the global marketplace. Also, with the rising inequality in Indian society due to skewed availability of opportunities and resources, promoting innovation will help complement the inclusive growth fundamental

With the above discussion the study aims at

1. Discussing the challenges of MSME in this fastest growing competitive world.
2. Finding out the gap related to existing policy and policy requirement.
3. Suggesting different policy initiatives that Indian Govt. should take up in a fast track process.

4. REVIEW OF LITERATURE

Laforet S. (2013) said today's Indian economy is characterized by great complexity and its growth mainly depends on the innovation. It is the one which increases the comfort level of a common man by offering value added products/services. These innovative firms create employment, generate revenue and also change the people's life style by offering quality products or services. Navickas V, Kontautiene R. (2013) also believed more innovation happens only if there exists an ecosystem which nurtures the ideas resulting in the creation of good number of technological innovations. Teece DJ (2006) emphasized innovation is a process rather than an event taking care of technology, manufacturing and other related activities. The innovation also depends on the

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firm's ability to respond the ever changing market demands. This is pronounced by Burgelman R, et.al (2004). Trott P (2002) viewed that innovations acts like a catalyst which enhances the performance of a company as compared with the company's not adopting innovations. Thus, innovation is a process of idea generation, technology management, commercialization of a new product or improvement of an existing product or process.

Innovations are not meant for only large firms (Laursen K, Salter AJ, 2004). In the existing competitive market, MSME should take an initiative to use all unmet needs and convert them as opportunities for its growth against the large firm's (Okrglicka M., 2014). The literature indicates that MSMEs have a significant potential that favours innovation. As against big players, the MSMEs can distinguish themselves with less bureaucracy in R & D system, ability to react quickly to the market demands and also less of goal conflicts among employee and employer (Rothwell R., Stock. G.N). In case of MSMEs, employer strategy to grow is only to seek the opportunity and convert them as innovative products/services (Lemaska-Majdzik A, 2014).

5. CHALLENGES OF INNOVATION IN INDIAN MSMES AND REQUIREMENTS

To improve the innovation performance of SMEs, it is very important to understand the key challenges in the innovation ecosystem. The challenges to innovation are classified in six categories: people, financial, information, government policy, infrastructure, and market constraints.

1. Youth and Skill Development

Development and implementation of any innovation demands skilled labor. The need for specialized skills in the form of scientists, technicians, or engineers is more apparent in the case of R&D innovations. Non-R&D innovations, such as organizational and marketing innovations, also require specialized skills and staff who are well versed in management and marketing practices. More than 85% of innovative small and medium firms see unavailability of skilled workers as a barrier to innovation, making it one of the foremost challenges in SME innovation

Requirement- The situation demands more targeted capacity building programs focused on a company's internal management and its relevance to innovation. There also seems to be a need for a system where SMEs have access to a pool of skilled people for conducting specialized work while addressing concerns about trade secrets.

2. Finance

The financial barriers mainly involve the availability of internal and external finance and the cost of innovation. More than 87% of innovative small and medium firms see limited availability of finance from both within the enterprise and external sources as a barrier to innovation. The cost of innovation is a key barrier for more than 75% of the innovative small and medium firms. This clearly shows that financial constraints remain one of the biggest barriers to SME innovation.

Requirement- The cost of innovation itself is high; secondly, SMEs lack the financial resources to implement innovation; and lastly, access to finance from external financial institutions seems to be limited, creating further bottlenecks. Therefore, there is an urgent need to address this formidable challenge by bringing down the cost of innovation and increasing the availability of innovation capital through banks and other support mechanisms.

3. Information

Timely access to valuable information is critical for SMEs to gain strategic advantage in pursuing innovation. The inability to access key market information can seriously impair a firm's performance. The information barriers refer to access to information on technology and markets. More than 75% of the innovative small firms and 86% of the medium firms face barriers pertaining to technology information and information on markets in India ().

Requirement-The inability to access such information not only affects SMEs' global competitiveness and exports but also limits their domestic market share. There is a need for the government to take adequate steps, maybe in partnership with local industry associations, to disseminate key market and technology information while focusing on strengthening SME–market linkages.

4. Government

The government has a critical role to play in every sphere of innovation including access to finance and technology, capacity building and human resources, market linkages, availability of research facilities, and access to key information, among others, via different policies and schemes. Nearly 68% of the innovative small firms and ~75% of the innovative medium firms see government policy and meeting government regulatory requirements as a barrier to innovation in India (). The perception of the government as a barrier, rather than a facilitator, for such a large number of innovative SMEs is a very serious issue.

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5. Infrastructure
Availability and access to infrastructure is crucial for R&D-based innovations. The ability of a firm to use laboratories and research facilities inside and/or outside the premises exerts a significant influence on its capability to develop R&D innovations. Close to ~50% and ~60% of the innovative small and medium firms, respectively, do not have access to adequate infrastructure and test labs.

Requirement- It is imperative for government and industry to facilitate the development of more shared research and testing laboratories, especially in key manufacturing clusters.

6. Market Factors
More than half of the innovative small and medium firms also face the barrier of uncertain demand for innovative products and services. Given the uncertain demand, SMEs would be reluctant to invest their resources in developing new products and would focus instead on improving their production and quality processes. Innovative products generally are aimed at a niche market that is often not clearly visible or present, and hence tackling these market-related challenges becomes very important. This also greatly hampers product and design innovation, which at times plays a critical role in elevating the exports and global market share of the SMEs.

Requirement- IPR in general remains an area of concern and development among Indian SMEs. There is a need to focus on capacity building programs to train SMEs to identify market potential and devise an appropriate entry strategy while addressing the IPR issues.

6. DISCUSSION ON POLICY INITIATIVES
In an important policy initiative, the Government has passed a Micro, Small and Medium Enterprises Development Act, 2006‘, which targets to assist the promotion and development and augment the competitiveness of MSMEs. The Act was came into force from 2nd October 2006 accomplished huge demand of this sector. Apart from giving legal strength to the definitions of MSMEs, this Act also comprises strict provisions relevant to the delayed payment to these enterprises.

Policies related to Finance
Up scaling existing schemes or evolving new schemes to assist MSMEs in acquisition, adaptation and innovation of modern clean technologies as well as creation of a Technology Bank/product specific technology centres to enable them to move up the value chain. The Government also worked on strengthening training institutions and upscaling training facilitation especially in the rural and remote areas. It has also initiated better marketing support to MSMEs and strengthening/creation of existing/new marketing support infrastructure/institutions;

Policies related to Infrastructure
A **Scheme for Promotion of Innovation, Rural Industry and Entrepreneurship (ASPIRE)** have been propelled on 2015 with a goal to set up a network of technology centers, speed up business enterprise and furthermore to advance new businesses for development and business in the country and agriculture-based industry with a reserve of Rs.210 crores. The arranged results of ASPIRE MSME initiatives are setting up Technology Business Incubators (TBI), Livelihood Business Incubators (LBI) and formation of a Fund of Funds for such activities with SIDBI. First LBI set up in April-2015 under ASPIRE within a month of propelling the Scheme. The principal cluster of 107 youth has been trained and talented through it. 19 LBIs have been endorsed till September 2015 and another 9 LBIs and 2 TBI are ready to be affirmed.

Policies related to Markets Factors
An MOU signed between India and United Arab Emirates (UAE) for co-operation in the field of Small and Medium Enterprises and Innovation that would benefit Indian SMEs and lead to equitable and inclusive development. The exposure to best practices in SME sector abroad would provide an opportunity to Indian SMEs to improve upon them and innovate further. It would also provide to Indian SME sector an opportunity to have a mutually beneficial relation with SME sector of the United Arab Emirates and to explore their markets. A Public Procurement Policy for MSMEs has been introduced for assisting the MSMEs in increasing their market share.

7. ISSUES THAT NEED IMMEDIATE ATTENTION FROM POLICY PERSPECTIVE
Although there is a long list of issues facing Indian MSMEs, current study brings forth following issues which need immediate attention from policy perspective. Firstly, there is a need for Promoting in-house R & D in MSMEs, Promoting R & D in lab and Institutions at a grant level and involvement of junior level staff in the process of new idea generation. The Govt should realize the increasing role of Venture Capital as a viable source of finance, increase use of financial management software and electronic security systems. The tax

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regime should be made more flexible and reasonable. Govt should try to improve the skill of youth through proper training. Fewer and simpler Government procedures, expediting import-export clearances, expediting patent awarding process in Indian Patent Office and Learnings from developed countries best practices are among the few required policy requirements needed for a fast track promotion in Innovation.

8. CONCLUSION

Despite the numerous challenges, the SME sector in India has performed well. There are distinct barriers to innovation, the most important of which seems to be government policy. A deeper analysis leads one to conclude that the government is trying to facilitate the growth of SMEs by promoting various schemes and programs to facilitate innovation in the sector through its distinct institutions. A holistic environment of access to risk capital, knowledge platforms and policy support will be needed to support India's growth story built on the pillars of Micro, Small and Medium Enterprises. The policy, institutions, and supporting framework have to be improved to remove SMEs' perception that government is limiting their success.

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A STUDY ON FINANCIAL PLANNING AS A TOOL FOR FUTURE SUCCESS

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ABSTRACT
The present study is an attempt to provide the Principles of financial planning which can provide a life changing contribution in understanding the need of insurance. The study has been made by collecting response of people through a structured questionnaire. A total of 100 respondents were collected to find out level of awareness and attitude of people towards insurance with special reference to Life insurance Corporation of India. Through a personal interaction with people on creating awareness of financial planning, findings shows people are aware of LIC and their offerings but yet most are underinsured. Mere awareness doesn't incline them to buy insurance but constant touch and proper explanation of financial planning principle can create a difference to save them and build a nation of insured masses.

Keywords: Financial Planning, Insurance

INTRODUCTION
India a Land of prosperity and rich heritage, has a population of 1.28 billion people. Known for wellbeing of masses, where most of people spends money on most luxurious white goods, cosmetics, travel and other leisure activities but the share of income on insurance is minimal. As rightly said food, clothing, shelter are our basic need the next basic need in life of uncertainty, pollution, accidents and mishaps is essentially "Insurance". Addressing this need rightly demands high attention, which can be rightly done through financial planning principles.

OBJECTIVES OF THE STUDY
1. To find out general public attitude towards insurance.
2. To find out awareness of general public on financial planning principle.

RESEARCH METHODOLOGY
Sources of data:

- Primary data: Researcher has collected the primary data through questionnaire. The questionnaire was sent through Google forms and personal one to one meet with sample respondents of Mumbai region.
- Secondary data: The data was collected from various secondary sources like journals, books, newspapers and websites

Sample design: For the purpose of study, respondents known were selected on the basis of convenient sampling technique.

Sample size: The sample size of 100 respondents residing in Mumbai region were posed questions through google forms and personal visit.

RESEARCH REPORT
Financial planning refers to planning for future in a best way to minimise the financial risk of loss that may arise due to death or any unforeseen incidence of family bread earner and/or ensuring that in case of loss the family income which he/she contributes is untouched. As emotional loss is bearable and gets reduced with passage of time but financial loss can create a real trauma for the loved ones. Financial planning is best tool to ensure that a right part of income is saved to ensure when you are there or not the basic lifestyle of family is intact. The small contribution can really make difference.

PRINCIPLE OF FINANCIAL PLANNING
Create and Save principle
Create and Save principle states. For family, most important stage for which a person essentially need to be financially secured would be basic education, career planning, marriage and retirement. And hence needs to starts making arrangement, understanding this needs. Often individual are having constant thought in mind thinking of such thing at back of his mind but many time doesn't have any concurrent planning. And as and when such event comes they arrange for same through their savings, fixed deposits, etc. Here they follow "Save and Create" principle to meet ends through as and when they occur. In case he meets some unfortunate event than his family will suffer as all his saving will be utilised and after some time they will have no funds and

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hence face dire consequence. But through "Create and Save" principle of insurance their whole planning would be complete and their family will be financially secured.

"Create and Save" principle says your 2000 percent of your monthly income should be Sum assured means the amount of insurance cover which you should have for whole life planning. In this case assume that person's monthly income is 5 lakh than he needs to have at least have 1crore insurance as sum assured. In such instance he is trying to create a corpus for his entire earning life span of 25 years, where he would need fund for his child's education, career and his retirement. For this he have to contribute premium which is 5 lakhs approximately yearly, which on maturity would yield him approximately 2.5 crore due to compounding principle. Hence financial planning for his near and dear ones is complete what he should do on his part. In create and save the moment person enter into insurance contract 1 crore fund is created on, day one of the contract and say after 3 years of entering into contract he died due to some unfortunate reason his investment of that 1 crore which would yield 2.5 crore would be intact and this fund which he created for his family would be given to them at right time .Here, due to insurance rider of premium waiver benefit clause all his future premium amount are waived as his family wouldn't be able to bear such cost and hence LIC contributes on his behalf so family receives what they deserve. In alternative situation his investment will stop as due to his death in any other financial products the moment saving stops , compounding stops but here though he is there or not LIC takes care and yields same amount which he has planned. Hence a best means otherwise if he wouldn't had understood this create and save principle his family had to bear both financial and emotional loss. Here due his first right step his basic family need is created and hence he has peace of mind.

Principle A by H

In this principle 'We' try to verify and prove the need of financial planning need. Many times when we are asked about the need of insurance we feel why do we need insurance and at other times we have insurance which we feel is reasonably sufficient. Rather than saying and assuming anything we verify whether there is need for insurance. In Japan, Toyota company rightly says don't assume verify ,don't say prove it . For this exercise certain questions are posed and respondent is asked to answer it honestly to get best result of the exercise as we don't assume anything we verify it in same way as when we get stomach pain we don't assume we get verified by visiting doctor and take remedial medicine accordingly. And hence financial planning need is there or not let's verify with some important questions posed to respondent.

A – Annual income from occupation

B – Annual income from spouse

C- Income from interest of fixed deposits if any

D- Income from Rent from property

E – Pension of your parents (if any)

F- Income from royalty

H – Your individual income divided by total income from all source

Here in most of the cases the answer obtained would be as A's contribution would be in the level of 80-99 percent. Hence shows the "breads earner" has major contribution to his family income and if he dies his whole family would be effected drastically. Say a motorbike when stops, we can push if it stops half way but due to not financial planning where a sole earner who runs the house and doesn't plan properly than the whole family had to bear as they are driven by truck which when if pushed by all still cannot move as here member of family cannot work and we wouldn't want them to work and earn when the are so small or are not equipped and mastered to work yet.

As "Bread earner" is major contributor in family income he have to do proper planning which is 5% of his annual income in form of premium to save our bread which is bear essential in this situation. As if person is not doing such planning means he is gambling with family's future for saving this income which is exactly meant for this need.

MAP OF LIFE PRINCIPLE

Just as a human lifecycle has three major stage in life: dependent stage, earning stage and retirement stage. Map of life helps to identify for an individual his important junctions which have passed like 10th matriculation, 12th and graduation which are quite important and remembered - their education stage; than the year of their first job , than their marriage , birth of their child, first purchase of car , house, foreign tour, etc are other important

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milestone . These all are known terrain. For future that is retirement he needs to earn so that unknown terrain is also planned and known. Map of life says today when I plan I have seen say 20 years of past which was reasonably good 'known terrain' , today at my earning stage through proper planning I can make that future which will come from 'unknown terrain' to a known independent and guarantee to reach the destination while enjoying the journey of destination. Planned people are independent and enjoy the terrain, while others either struggle or on charity and begging of others.

In life we spent one part of time in education say till 20 th age and for professional it would be 25th age than most people start earning and from than to say another another 35 years means on 60th they retire and their income stops. Proper planning will ensure that their earnings are invested in such a way that after retirement their unknown terrain is enjoying and financially independent. But this is not possible for most and they have to be dependent on their children or they live life remorse. And for few they are struggling and begging for even day to day expenses. In map of life principle awareness is drawn in this 35 year of roughly earning age through financial planning a corpus has to be created so person lives life fully enjoying.

Here most important thing explained is when he has invested soundly he can have independent life and if not than he has to struggle or even beg. Hence through map of life he is made to narrate all what he experience at important junction, his good and bad memories and what are is aspirations and dream which otherwise he would have not thought of. Hence creating a need for financial planning.

DATA INTERPRETATION OF PRIMARY RESEARCH

Of the respondents posed questionnaire 20 percent were professionals, 10 percent retired and 50 percent were doing service and 20 percent qualified house wife's.

By explaining this three principles applicable as per their need they were partially convinced to invest for their family needs. Few understood the concept but they feel mutual funds, equity and post office saving schemes are most attractive and feel investment in Lic financial planning schemes are less return yielding hence didn't find attractive.

FINDINGS AND OBSERVATIONS

Purpose decides objective and the choice .To cite an example for gardening we don't use drinking water and vice versa. Similarly for securing our families future we can't depend on unsecured and risky proposition. We need complete safety and security. For our dear ones we can't keep their future unplanned or partly planned except for few respondents who invested in mutual funds, equity and such other scheme; where their presence is utmost important as their wit and knowledge in absence of them due to unforeseen circumstances cannot be entrusted to their dependant who are yet innocent to this ever challenging world. Hence small step through laddering in safe financial planning will surely give them a peace of mind and help them to be financially secured.

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GROWTH AND DEVELOPMENT OF EXCHANGE TRADED FUNDS (ETFS) IN INDIA

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ABSTRACT
Increased investor money is flowing into capital markets through mutual funds, both globally and in India. Though actively managed funds dominate Assets Under Management (AUM) charts, increasing awareness and trading volumes are channelling investments into passive investing products such as Index mutual funds and Exchange Traded Funds (ETFs). With stock exchanges designing and offering a variety of indices, more Asset Management Companies (AMCs) are seeking permission from market regulators to start offering newer ETF products. Governments, such as in India, are using the ETF route to achieve its divestment targets. ETF volumes of equity and commodities are picking up on trading terminals as India is gearing up for new ETF categories - Debt ETF and Smart Beta ETFs. All these facts point out that Indian financial market is joining the matured markets league. Mere building new financial products might not be sufficient and chasing growth always poses challenges. This paper attempts to understand the concept and dynamics of ETFs, recent regulations, how Governments are using them in their divestment process and to understand if Indian investors are ready for such products. Further, we attempt to give some suggestions that help deepen ETF penetration in India.

JEL Classification: G23, G11, G18, G19

Keywords: mutual funds, ETF, exchange traded fund, index fund, passive investing, smart beta etf

INTRODUCTION
Eugene F. Fama’s Efficient-Market Hypothesis (EMH) says that all information known (to the market) will be fully priced in the asset and that it is “impossible to beat the market” in a consistent manner on a risk-adjusted basis (Fama, 1970). This research led to the concept of passive investment and the development of two popular passive investing products - Index Fund and Exchange Traded Funds (ETFs). An Index fund is a type of mutual fund which tracks a benchmark index and invests in securities (stocks, commodities etc.) as specified by the index according to weighted market capitalizations mentioned by the index. Fund managers rebalance the constituents every time the index is rebalanced (usually once a quarter). An ETF is similar to an index fund but trades like a stock on the stock exchange and hence has better price discovery and liquidity. However, investors need a demat account to hold their ETF units.

2018 has taught us two important lessons. Firstly, increased retail investor inflows into mutual fund strengthened the Indian capital markets thereby reducing dependence on FPI / FIIs inflows in recent times. Secondly, much of these inflows are into active fund management because fund managers indeed have given superior alpha returns in the past. However, trends changed in 2018 wherein passive funds outperformed their active peers - a sign that Indian stock markets are possibly maturing. Transparency (because of blind replication of the underlining index), low operating cost (including low fund management cost), periodic balancing, liquidity, no entry-exit loads, negligible Securities Transaction Tax (STT) (negligible in case of ETFs vs up to 10bp in stocks) are key advantages of ETF investing. Lack of sufficient traded volumes and tracking error are key deterrents for an ETF investor.

OBJECTIVES OF THE STUDY
1. To understand the growth and development of the ETF market with specific reference to India.
2. To understand the preferences and challenges of the Indian ETF investor.
3. To understand emerging trends and development in ETFs.
4. To make suitable suggestions to regulators and other stakeholders for better product development.

SIGNIFICANCE OF THE STUDY
1. Recognizing that the gap between active and passive investing is narrowing down gives an opportunity to understand a shift in investor strategies.
2. While plain vanilla ETF investing itself is new, global headwinds are towards Smart Beta ETF or ETF 2.0 and Active Factor ETFs. This study helps us understand if the typical Indian investor is ready or not.
3. Regulators and product developers can get insights for better product design and positioning.

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DISCUSSION

ETFs are a wonderful financial product innovation in the last 25 years. The Toronto 35 Index Participation Fund (TIP35), launched in March 1990 in Canada, is perhaps the first ETF. The first US ETF is the S&P SPDR (SPY/Spiders) launched in 1993. The US ETF industry recently completed 25 years of their operations and have come a long way since then - enjoying healthy daily traded volumes, often topping and beating individual company stocks in volumes (9 ETFs feature in Top 25 volume charts). European stock exchanges started trying ETFs in 2000. The LDRS DJ STOXX 50 listed on the Deutsche Börse and the LDRS FTSE 100 on the London Stock Exchange (both in April 2000) are the first European ETFs.

Today, the Global ETF industry is managing $4.9 trillion Assets Under Management (AUMs). US leads ETF volumes with a 72% market share followed by Europe (16%), Asia Pacific (9%) and Rest of World (3%). There are 4,535 ETFs globally with 1,569 in US alone. Significant number of new ETFs are launched in 2018 (ICI, 2018). Estimates say that ETF AUMs would touch $7.6 trillion mark by 2020 and even surpass active investing by 2027 (EY, 2017). Since large issuers and asset managers have their own brokerage, advisory, risk-management and custody businesses, they would have an edge over other players because of their ability to cut cost and thereby have lesser tracking error. Studies show that as many as 72% of US ETF schemes of 2018 have expense ratio of 0.20% or lower. The fee war is fierce in the US and is now spreading to international and fixed-income funds. Mergers in AMCs will lead to concentration of ETF market into fewer bigger hands.

The first Indian ETF is the Nifty Benchmark Exchange Traded Scheme (Nifty BeES) launched by Benchmark Mutual Funds (later acquired by Goldman Sachs and subsequently by Reliance MF) in December 2001. It got listed on the National Stock Exchange (NSE) and is trading since January 2002. The Finance Ministry, by way of special notification, started allowing Gold ETFs in 2007 so that Indians can invest in “paper” gold via stock exchange over buying physical gold. The Gold ETF regulation was later entrusted to the market regulator Securities and Exchange Board of India (SEBI). Debt ETFs and International ETFs too started gaining popularity but failed in getting sufficient attention.

The Indian ETF industry has grown from 6 ETFs in 2007 to 66 in 2018- at 28% CAGR over a 11-year period. AUMs grew 10x in the last three years alone - from Rs. 8,900 crores three-years ago to Rs. 89,500 crores as of October 2018. Despite crossing the Rs. 1 lakh cr AUM mark in 2018, it represents a mere 4% of the overall MF AUMs. Employee Provident Funds Organization (EPFO) is the largest ETF investor. Increased participation is coming from High Net worth Individuals (HNI) and retail investors. As much as 93% of Indian ETF investments are in equity and the rest is with gold and debt.

Very few Indian AMCs offer passive investing products. Out of 44 AMCs, only 15 offer ETFs and only 14 offer index funds. Further, Reliance Mutual Fund dominates the ETF landscape with 50% ETF folios and 90% market share in daily ETF volumes. Stock exchanges are creating newer and variety of indices allowing AMCs to come up newer ETF products. Though investors are getting more choice, this would lead to increased distribution / scattering of assets / inflows across ETFs further reducing liquidity. While allowing newer ETF is good, higher priority should be given to increasing volumes by increasing investor participation.

Different type of institutional investors would be using ETF in different ways. Some use it for liquidity management with selective exposures (pension funds, insurance companies and investment funds), some for building blocks and international exposure (such as banks), some for portfolio modelling (wealth managers) and others for leverage or inverse ETFs for long-short strategies (such as hedge funds).

ETFs AS A DISINVESTMENT ROUTE

Government of India is using the easier ETF route to raise money as a part of its disinvestment strategy. CPSE ETF and Bharat 22 ETF are its two flagship products. CPSE ETF issued by Reliance Nippon AMC with 11 public sector companies is another star ETF through which the Government successfully raised funds. First launched in March 2014, CPSE ETF New Fund Offer (NFO) was oversubscribed and Rs. 1,363 cr was refunded back to investors because the issue size was limited to Rs. 3,000 cr. Subsequently, Further Fund Offers (FFO)s are issued in January 2017, March 2017, November 2018 (FFO3 - biggest disinvestment transaction raising Rs 17,000 cr).

Issued by ICICI Prudential AMC in November 2017, the Bharat 22 ETF is a basket of 22 diversified companies – 16 central public sector enterprises (CPSEs), three public sector banks and three private sector holdings (ITC, L&T and Axis Bank) of Specified Undertaking of Unit Trust of India (SUUTI). The Government raised Rs. 22,900 cr from Bharat 22 ETF (Rs. 14,500 cr in November 2017 and Rs 8,400 cr in June 2018). About Rs 10,000 cr would be raised in 2019 as part of the third tranche. A global ETF listing on an overseas stock exchange, perhaps in FY20, is also planned.

Discounts at NFO and loyalty bonus for those who held it at least for a year were given to attract retail investor participation. Sensing the interest, Government is planning to raise Rs 20,000 cr via Debt ETF over the next one-year. The Department of Investment and Public Asset Management (DIPAM) shortlisted Edelweiss AMC to manage CPSE Debt ETF. A sizeable portion of the disinvestment of FY20 would be raised through ETFs.

ROLE OF REGULATOR

Indian ETFs and index funds have begun giving better returns over active mutual funds, particularly in the large cap category. SEBI's Categorization and Rationalization of Mutual Fund Schemes in October 2017 insists that a large cap mutual fund scheme should have a minimum of 80% assets in large cap equity and equity-related companies restricting the fund managers' playground size. Expense ratio of ETFs is mere 0.1% and 0.2% compared to 2% to 2.5% of actively manged large cap mf schemes. Clearly, expenses are eating scheme returns in active funds.

Efficient functioning of any financial product needs efficient regulation. Surveys shown that 15% to 25% of ETF inflows in the next three years will come from new ETF investors and this class of investors who require a lot of understanding about the product. Regulator SEBI, in January 2019, issued new portfolio concentration norms insisting that the index tracking of an ETF shall have a minimum of 10 stocks such that no single stock constitutes more than 25% of weightage in case of an Equity ETF and 35% weightage in case of a sectoral / thematic ETF. Further, top 3 holdings cumulative weightage should not exceed 65%. A minimum 80% trading frequency is necessary for individual index constituents. Average impact cost is to be capped at 1% or less over the previous six months. Though issuers can make constituent changes anytime, compliance is necessary once a quarter. Existing ETFs are given three months to ensure compliance.

SMART BETA ETF

Globally, industry headwinds are moving towards Smart Beta ETF or ETF 2.0 wherein the fund seeks to bridge the gap between active and passive investing strategies. The term "smart beta" was first used by consulting firm Towers Watson in 1970. The theory behind the smart beta concept was designed by Harry Markowitz in his Modern Portfolio Theory (MPT). Smart Beta ETFs get increased attention during volatile times, such as during the 2008 financial crisis when institutional investors started showing interest.

Returns from traditional market weight (capitalization) linked ETFs depend on the performance of the underlying index. Smart Beta ETFs are "strategically constructed" by following a rule-based, key-person de-risked approach to enhance returns, improve diversification and reduce risk by combining both passive and active investing strategies. By passive strategies, the ETF will still follow and track a pre-determined index. By active strategies, it considers certain investment characteristics called "factors" that explain the risk and return of a security (such as value, momentum, quality, size, low volatility, high dividend yields etc.) (Bender, Briand, Melas, & Subramanian, 2013). All these features are boxed into a low-cost ETF product called a Smart Beta ETF.

Invesco S&P 500 Equal Weight ETF (RSP), launched in 2003, is the first US Smart Beta ETF. US Smart Beta ETF assets evolved from US $74 billion in 2006 to $504 billion in 2017. Meanwhile, Vanguard is taking the concept to the next level by launching the first "Active Factor ETF" in 2019.

Back home in India, there are 9 Smart Beta ETFs so far but they are still struggling to catch attention. Having not seen a complete bull-bear cycle and with no separate guidelines for smart beta ETFs, the segment is still in baby stage. A section of analysts feels that ETFs in general and Smart Beta ETFs in particular are futuristic and ahead of time for the Indian investor.

LITERATURE STUDY

Several studies have dealt with different aspects of ETFs - investing strategies (active and passive), suitability and behavioural aspects of different investors classes (individual, institutional etc.), comparative studies (with index funds, hedge funds, unit trusts etc.), market development (better stock price discovery, better valuations, reaction to information flows etc.), reaction to events (such as brexit, eurozone sovereign debt etc.), and performance aspects (pricing efficiency, tracking error, stock volatility and possibility to liquidity shocks etc.).

Indian investors are not so keen on ETFs because of lack of product variability, liquidity and product knowledge (Kurian, 2017). Decrease in liquidity leads to increase in bid-ask spreads on the trading terminal. Higher bid-ask spreads in Indian ETFs is increasing tracking error when compared to index funds (Mahajan, 2017). Price divergences lead to arbitrage opportunities and if arbitrageurs have the ability to quickly exploit the opportunity using intraday pair trading strategies, they could make decent annual profits (Marshall, Nguyen, & Visaltanachotic, Sep 2013). While tracking error is responsible for over or underperformance of the ETF in the

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short-run, it comes closer to index returns in the long-run. Sudden large-scale shift from active to passive funds would possibly have negative effects in areas such as corporate governance, product market competition and might increase systemic risk (Bessler & Hockmann, 2016). Indians have special importance for Gold and considerable literature has deal with Gold ETFs. To date, Indian Debt ETFs are not closely studied.

Being not so popular in India, there is a notable paucity of studies in this field. This paper attempts to expand our body of understanding of the Indian ETF investors and the markets.

RESEARCH METHODOLOGY

This study uses Descriptive research to gather preliminary information, *observe* the past growth and expansion of ETFs both globally and in India, *record* the trends and *describe* the understanding.

DATA COLLECTION

Primary data from a survey of 120 investor respondents from diversified demographics is collected. Secondary data from several journals, research papers, official websites of SEBI, stock exchanges and mutual funds is used to collect information necessary for this study.

FINDINGS

1. Indian investors prefer active (65%) over passive fund management. Most respondents (64%) have less than a year experience with ETFs. They invest in an ad-hoc basis (80%) instead of investing periodically (say daily, weekly, monthly etc.)
2. Lack of sufficient trading volumes (46%) is a major deterrent. 91% feel awareness camps are to be organized to understand ETF better.
3. NSE (51%) is their preferred stock exchange. Reputation of the fund house is very important for them (45%).
4. 62% feel diversification of underlying assets is very important in the ETF. 66% respondents give importance to low cost fund management.
5. 60% respondents say ease of transaction is very important for ETFs. 66% respondents say special treatment (such as by offering tax incentives, zero brokerage & demat charges etc.) will increase ETF penetration.
6. Most respondents (88%) have not heard of Smart Beta ETFs.

RECOMMENDATIONS

1. Investor camps and product advertising dedicated to ETFs should be taken up by market intermediaries to inculcate the habit of passive investing.
2. ETF, as a product should be made more attractive by way of lower tax treatment, lower brokerage and demat charges, leverage in the form of margin money for trading etc.
3. Currently, Gold ETFs are buying physical gold corresponding to their assets. This is not economically productive for the country. They should be allowed to buy Gold Futures instead.
4. ETFs should be allowed to invest in commodity derivatives by rolling over in the futures segment at each expiring contract. This is practically possible since ETF investments are usually for the long-term.
5. EPFO should be allowed to invest in all forms of ETFs and should not be restricted to Nifty 50, Sensex, CPSE ETF and Bharat 22 alone. Further, they should consider diversification to other AMCs and not be limited to SBI MF alone.
6. Indian equites market (and thereby ETFs) are allowed to trade till 3:30 PM while the cut-off time for Mutual Funds (and thereby to Index funds) is only till 3:00 PM. This time disparity needs to be eliminated.

CONCLUSION

The gap in assets managed by active and passive investing styles is narrowing down with passive funds getting ready to dominate. Penetration of ETFs is low in India because of lack of product understanding and lengthy and uncomfortable transaction process – something which needs to be simplified. Indians are still largely comfortable with traditional savings products over investing and within the investing universe, active fund management dominates passive. Product awareness is critical to get more investors to ETFs so as to increase liquidity and trading volumes. Investor camps, simplified products, lower tax treatment and lower expenses would encourage more investors to try ETFs. Government will continue to use ETFs as part its disinvesting strategy expanding its product offering with the addition of debt ETF. Indian ETF market is too young and hardly has seen completed market cycles and hence will take a lot of time to understand Smart Beta ETF and Active Factor ETFs. ETF regulations will get strengthen over time as experience comes in.

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NON-PERFORMING ASSETS IN INDIAN URBAN CO-OPERATIVE BANKS – A STUDY OF GOVERNMENT INITIATIVES

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INTRODUCTION

Co-operative Banks in India have become an integral part of the success story financial inclusion. In India with the enactment of the Co-operative Credit Societies Act 1904 provided for formation of co-operative credit societies. Under the Act of 1904, a number of co-operative credit societies were started. Owing to the increasing demand of co-operative credit, a new Act was passed in 1912, which provided for the establishment of co-operative central banks by a union of primary credit societies.

"A Co-operative bank, as its name indicates is an institution consisting of a number of individuals who join to pool their surplus savings for the purpose of eliminating the profits of the bankers or money lenders with a view to distributing the same amongst depositors and borrowers."

STRUCTURE OF CO-OPERATIVE BANKS

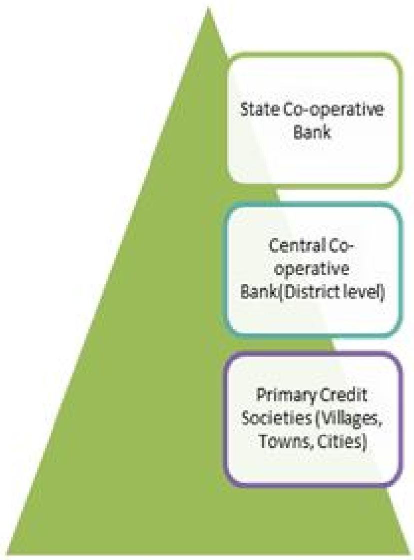

Chart-1: Basic Structure of Co-operative Banks

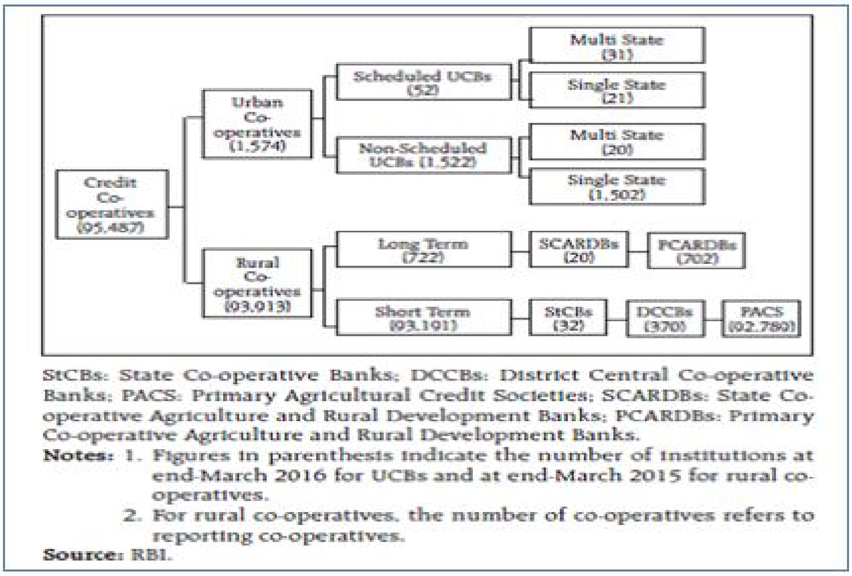

Chart-2: Structure of Co-operative Credit Societies

NON-PERFORMING ASSETS

NPA (non-performing assets) is a banking and finance term. When bank or finance company is unable to recover its lent money from borrower in 90 days, then the amount which has not been recovered will be treated as NPA. It represents bad loans, the borrowers of which failed to satisfy their repayment obligations. With effect from March 31, 2004, a non-performing asset (NPA) shall be a loan or an advance where;

- Interest and/ or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- The account remains 'out of order' for a period of more than 90 days, in respect of an Overdraft/Cash Credit (OD/CC),
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- Interest and/or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and w.e.f 30.09.2004 following further amendments were issued by the Apex Bank,
- A loan granted for short duration crops will be treated as NPA if the instalment of principal or interest thereon remains overdue for two crop seasons.
- A loan granted for long duration crops will be treated as NPA if the instalment of principal or interest thereon remains overdue for one crop season
- Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

TYPES OF NPA
NPA may be classified into

a. Gross NPA
Gross NPA is advance which is considered irrecoverable, for which bank has made provisions and which is still held in banks' books of account.

b. Net NPA
Net NPA is obtained by deducting items like interest due but not recovered, part payment received and kept in suspense account from Gross NPA.

GOVERNMENT INITIATIVE
While lenders have been making every possible effort for recovery of NPAs, it is the Indian legal system, which is not supporting these efforts, as it is more geared to protect borrowers and not lenders. Whereas, borrowers can use hundred and one tactics to delay the recovery process, the creditors have practically no right(s). As a result, there was nothing that a bank or financial institution could do after the money was disbursed to the borrower(s). It is often said, **"In India, one can see sick companies and closed factories, but not sick promoters"**

(1) Lok Adalats: Lok Adalats have been set up for recovery of dues in accounts falling in the doubtful and loss category with outstanding balance up to Rs. 5 lakhs, by way of compromise settlements. PSB filed 33,17,897 cases involving Rs. 457 billion up to March 2018. They have been able to recover Rs. 18 Billion only upto March 2018 i.e 4%. This mechanism has, however, proved to be quite effective for speedy justice and recovery of small loans.

(2) Debt Recovery Tribunal (DRT): 29 DRTs have been set-up in the country during the last decade. DRTs have not been able to deliver, as expected, as they got swamped under the burden of large number of cases filed with them since their inception. Total cases 29,551 involving Rs. 1333 billion out of this 72 billion were recovered till 31st March 2018.

(3) One Time Settlement Schemes: One-time settlement or OTS is a type of compromise settlement executed by the banks in order to recover non-performing assets (NPAs). OTS is a scheme where the borrower (the one who has defaulted) proposes to settle all the dues at once, and banks agree to accept an amount lesser than what was originally due. The banks settle the loan and waiver/write it off against a one-time instalment, thereby compromising on a portion of their profits.

(4) Corporate Debt Restructuring (CDR): CDR is a non-statutory mechanism institutionalized in the year 2001 to provide timely and transparent system for restructuring of Corporate Debts of Rs. 20 crore and above, of viable entities financed by Banks and FIs under consortium or Multiple Banking Arrangements. It is voluntary System based Debtor Creditor Agreement (DCA) and Inter Creditor Agreement (ICA), At present, 10 Financial Institutions and 49 Public and Private Sector banks are the members of the CDR mechanism

CDR system is applicable to the Standard and Sub-standard Loan accounts. However, as er the latest modification, viable doubtful assets can also be taken up for restructuring, based on the consensus among at least 75% of the lenders.

(5) SARFAESI ACT, 2002: The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, meant to tackle corporate offenders, allows banks the liberty to takeover and sell mortgaged property with just a newspaper notification. Total cases 91,330 involving Rs. 1067 billion out of this 265 billion were recovered till 31st March 2108.

OBJECTIVES
The study aims to gain insights into the position of Urban Co-Operative bank. The following broad objectives are laid down for the study:

1. To study the government initiatives to control NPA in banking industry
2. To study NPA trend in last 3 years of urban co-operative banks in Mumbai City.
3. To find out the way in which the UCB's managed their NPA Properly by using government policies.

REVIEW OF LITERATURE
Many published articles are available in the area of NPAs and a large number of researchers have studied the issue of NPAs in banking industry. A review of the relevant literature has been described as under.

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According to Ravi Kumar, B.V.S.S. Subba Rao, G.D.V. Kusuma (2018), a baking sector is one of the most important essential factors for developing rapidly and successful economy. A low level of NPAs determines low degree of credit default, which does not affect the bank and the economy and vice versa. Increasing NPAs discourages the investors from investing in such industry, i.e. banking industry, thus in such ways the bank losses the investment from the public. The main aim of the study is to identify the causes for increase in NPAs. In this study the data is collected through both methods i.e. primary and secondary. The primary data is collected through questionnaire, and secondary data is collected through newspaper, journal, and websites. The research that was carried out was explorative. The paper discussed the major causes of increase in NPAs. The tools that have been used in the study were tables and applied arithmetic means, percentage and Garrett Ranking Technique. Based on the data collected ineffective recovery tribunal was the most important reason, followed by Industrial sickness, Change of government policies, Poor credit appraisal system, Wilful defaults, defective lending process, lack of demand, inappropriate technology, managerial deficiencies, improper SWOT analysis, natural calamities and absence of regular industrial visit.

Satpal (2014) in his paper "As comparative study of NPA in Public sector and Private sector bank in the New Age Technology" held that the NPAs are one of the major concerns for banks in India. NPAs reflect the performance of the bank. A high level of NPAs suggests high probability of many credit defaults that affect the profitability and net-worth of the banks and also erodes the value of the assets. NPAs affect the liquidity and profitability, in addition to posing threat on quality of assets and survival of banks. The Indian banking sector has been facing serious problem of raising NPAs. The NPAs is not only affecting the banks but also the whole economy. It is necessary to trim down NPAs to improve the financial health in the banking system. An attempt is made in this paper to define NPA, explore the factors contributing to NPAs, reasons for high NPAs, and their impact on Indian Banking operations and the trend and magnitude of NPAs in selected Indian Banks.

G. Seetharaman (2013) in his article "How It Buck The Trend" held that, on the whole, the performance of the UCBs is underwhelming, so how did Saraswat Bank beat the odds? The articles consist of comparative performance of NPA of three leading UCBs - Saraswat Bank, Punjab Maharashtra Co-operative Bank and Shamrao Vithal Co-operative Bank which have done excellent work in managing the NPA. The Saraswat Bank has more branches. The bank had lent 80% of loan to small and medium scale sector. Thus, Saraswat bank proves that proper management of lending process reduces NPAs drastically.

RESEARCH METHODOLOGY

The present study is based on secondary statistical data. The banks for study are chosen as per convenience only. The sample consists of three Urban Co-operative Banks. The study is done based on data for the period of three years from the financial year 2015-16 to 2017-18 and secondary data is collected mainly from the sources available at internet like the RBI website, websites of the banks etc. Data is presented with the help of Graphs, charts and tables etc.

Table-1: Gross and Net NPA of urban co-operative bank Large Size UCB's (Amt in 'Cr')

Year	Saraswat Co-operative bank				Shamraro vithal Co-operative bank				Panjab & Maharashtra bank			
	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA	GNPA	%GNPA	NNPA	%NNPA
2015-16	848.62	4.17	363.25	1.83	338.25	3.82	208.87	2.36	76.52	1.39	38.42	0.70
2016-17	997.77	4.63	380.03	1.82	355.59	3.83	218.02	2.35	111.86	1.74	61.25	0.96
2017-18	872.27	3.72	213.9	0.94	370.38	3.59	187.52	1.82	148.00	1.99	77.15	1.05
Total	2718.7	12.52	957.18	4.59	1064.2	11.24	614.41	6.53	336.38	5.12	176.82	2.71

Sources:www.saraswatbank.com,www.shamraovitalbank.com,*www.reportjunction.com/Reports/Abhyudaya-Co-Op-Bank-Limite.*

ANALYSIS OF DATA

In the data analysis some abbreviations have been used. The full form of these abbreviations is as follows

(1). GNPA- Gross NPA (2). % GNPA- Percentage of Gross NPA to Gross advances

(3). NNPA – Net NPA (4). % NNPA- Percentage of Net NPA to Net advances

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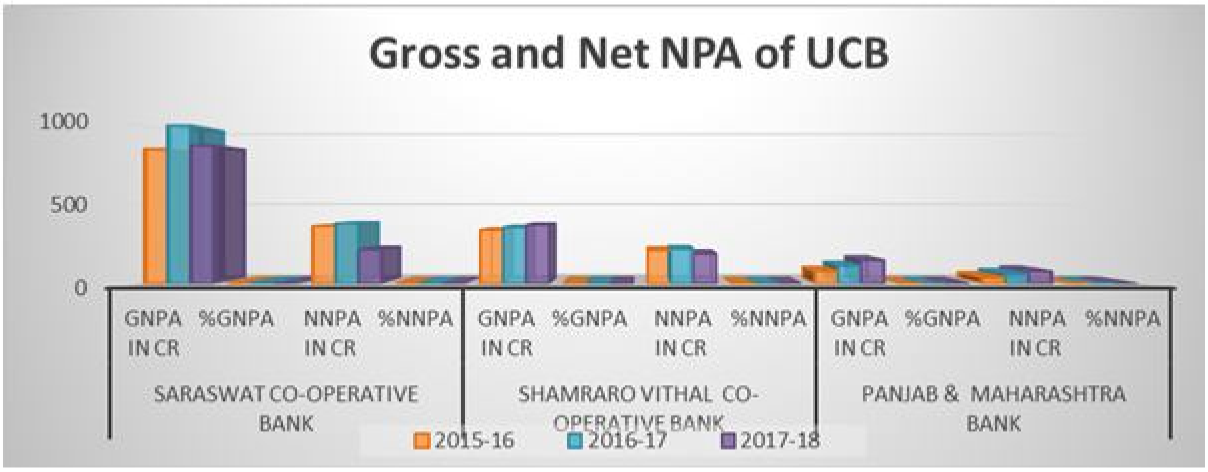

Figure-1

The above figure 1 indicates that GNPA of Sarawat co-operative bank is more as compared to Shamraro vital bank and Panjab & Maharashtra bank but the NNPA of Shamraro co-operative bank is more as compared to other twon bank

Table-2: Comparative study of NPA of Banking Sector by March 2018

Items	UCB	PSB
GNPA Ratio %	7.1	15.6
NNPA Ratio %	2.7	5.56

Source: Trend and progress report RBI 2017-18

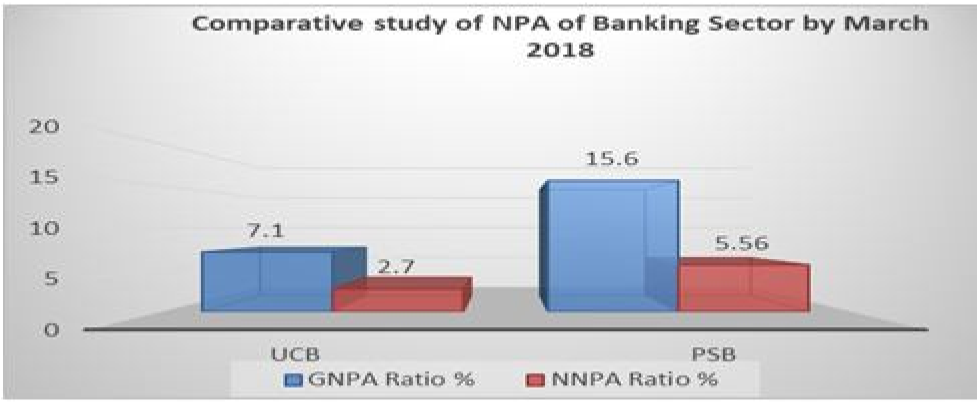

Figure-2

In above table and figure clearly showed that Gross NPA is very high in PSB as Compared to UCB in Indian Banking Industry.

FINDINGS

1. UCB have very low NPA as compared to PSB as indicated in table 2 and fig.2
2. The management of NPA is proper UCB's as compared to PSB as indicated in above data analysis
3. The government of India had developed various measure to control NPA which are properly followed by UCB as compared to PSB.
4. The banks have managed NPA well due this the NNPA is relatively low in UCBs

LIMITATIONS OF STUDY

Some of the limitations faced during this study are

1. For the purpose of this study only data of 3 years has been taken that is from financial year 2015-16 to 2017-18
2. The data is collected from only three urban co-operative banks.
3. The study focusses only on the comparison of trend and amount of NPA in different co-operative banks and PSB
4. The study is based on secondary data.

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CONCLUSION

The NPAs have always created a serious threat for the banks as well as economy. The money locked up in NPAs has a direct impact on profitability of the bank. The overall baking industry is highly dependent on income from interest on funds lent. The government of Indian initiated lot of measure such as DRT, SARFEASI Act 2002, OTS, Lok Adalat etc. which are helping banking industry to control NPA. As research paper clearly showed that NPA is one of the threating factor for the baking industry. The RBI Projection shows the gross NPA of baking industry could go up to 19.7% by March 2019. It is a very serious issue in Banking sector in India. At the same time the study shows that the UCBs have managed their NPA more efficiently as compared to PSBs. The government of Maharashtra has also initiated the scheme of One Time Settlement which is helpful to control the NPA as well as following KYC norms is one important tool to manage NPA.

Finally, the RBI or Government is only the introducer of the different policies, but it is the duty and responsibility of the banks official to implement them rigorously. Though the UCBs form a very small section of banking sector as compared to PSBs, they have implemented the government initiatives more efficiently and have been able to minimise the NPAs.

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REVIEW OF POLICY AND DEVELOPMENTS OF FOREIGN DIRECT EQUITY INVESTMENT INFLOWS IN INDIAN ECONOMY

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ABSTRACT
This study explains into foreign direct investment inflows in India. The important role of direct investments comes into our country, it will increase in Indian economic growth. Hence, automatically transfer to financial assistance, skill & knowledge based development, technology, employment generation and create productivity, improve forex position with home & host countries and increasing exports of goods to other countries. All companies are entering in two ways, one is automatic route & another one is government route. This study mainly focuses country –wise & Sector –wise and year –wise investment inflows in India. The study, based on Secondary data which have been collected through reports of the Ministry of Commerce and Industry, Department of Industrial Promotion and Policy, Government of India, Reserve Bank of India, and World Investment Report. The study concludes that Mauritius emerged as the most dominant source of FDI contributing. It is because the India has a Double Taxation Avoidance Agreement (DTAA) with Mauritius and most of the foreign countries like to invest in the service sector.

Keywords: FDI inflows, Country –wise, Year-wise, Sectors-wise.

INTRODUCTION
India is having more Resources like Man power, land, water, Natural & environment, power, etc., but we are not convertible for any productive purpose reason does not have investment capital, warehouse facilities, infrastructure , transport, maintenance facilities also. That purpose only our government has introduced to LPG system was followed in India since 1991. LPG means Liberalization, Privatization and Globalization. LPG system explains how to invest in any country and develop the business world wide most of the developed countries make good relationship among the country for the development of business.

Developed countries are interested in investing in particular sectors in underdeveloped countries. Hence our nation also developing country still so many developed countries focus & invest in our nation. This is also import role of Indian economic growth and development. It will make good relationship for our countries. This type of relationship only creates for financial assistance, skill development, employment service, infrastructure, maintained service & technology transfer one country to another country. And same time increasing in growth & GDP level also. In comparing to other countries, it's more comfortable invest any business in India. Foreign developed countries are investing on taken for sharing profit on increased of Indian rupee's value also.

OBJECTIVES OF STUDY
- ✓ To understand the benefits of foreign direct investment in India.
- ✓ To explain investment levels of country-wise & year-wise investment evaluated FDI in India.
- ✓ To understand the country & sectors based upon highest FDI inflows in India.

RESEARCH METHODOLOGY
This research is a descriptive study in nature the secondary data was collected from various journals, magazines, and websites, particularly from the Department of Industrial Policy & Promotion, Ministry of Commerce and Industry etc.

NATURE AND SOURCES OF DATA
Web sites of Government, Books and magazines related to FDI inflows related with different sectors, Reports and publications of various associations connected with business and industry, agencies, government etc., Historical documents and other sources of published information.

LITERATURE REVIEW
Bhattacharyya Jita, Bhattacharyya Mousumi (2012), "Impact of Foreign Direct Investment and Merchandise and Services Trade of the Economic growth in India: an Empirical study", the study revealed that there was a long term relationship between FDI, merchandise, service trade and economic growth of India. Bi-directional causality is observed between merchandise trade and economic growth, services trade and economic Growth. Unidirectional causality is observed from FDI to economic growth and FDI to merchandise trade. A unidirectional causality is also observed from merchandise trade in services trade. **Abdul A., Morris R. (2011),**

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"Ease of doing business and FDI inflow to Sub-Saharan Africa and Asian countries" The study found that two factors, "registering property" and "trading across borders", were found to be related to FDI over all six years of the study (2000-2005) for the combined sample. Also, several factors were found to be related to FDI received by SSA and Asian countries during various years. **Gubbi S. R., Aulak P. S., Ray S., Sarkar M. B., Chittoor R. (2010), "Do international acquisitions by emerging-economy firms create shareholder value? The case of Indian firms"** found that the international acquisitions facilitate internalization of tangible and intangible resources that are both difficult to trade through market transactions and take time to develop internally, thus constituting an important strategic lever of value creation for emerging-economy firms. An event study of 425 cross-border acquisitions by Indian firms during 2000–2007 supports our predictions.

FOREIGN DIRECT INVESTMENT IN INDIA

The Indian government realized the fact that foreign direct investment plays a very crucial role in boosting the country's economy by developing the infrastructure, generating new jobs, transfer of technology, and increasing productivity. Thus the government of India liberalized its economic policies in order to use foreign direct investment as a developmental tool. India offers several positive incentives to the foreign investors such as an abundant supply of educated workforce, low wages, and very strong economic growth in the country which has increased the middle class's power of buying.

FLOW OF FOREIGN DIRECT INVESTMENT FROM MAURITIUS TO INDIA

The first rank goes to Mauritius in terms of highest inflow of foreign direct investment to India in comparison with all the other countries that make investments in India. This is due to the fact that special tax treatment is given to all those investments that come through Mauritius to India. The total amount of FDI from Mauritius to India came to ` 27,891.15 crore between 1991 to 2002. The total percentage of FDI from Mauritius to India stood at 38.7% out of the total foreign direct investment in the country from 1991 to 2002.

EFFECTS OF FDI FROM MAURITIUS TO INDIA

The effects of increased flow of foreign direct investment from Mauritius to India has been that it has led to the generation of a lot of new employment opportunities, development of the sectors that have received investments, and also growth of the country's economy. FDI from U.S.A FDI from U.S.A to India is increasing at a very fast pace over the last few years due to the several incentives that has been given by the Indian government. The huge flow of FDI from U.S.A to India has given a major boost to the country's economy.

FOREIGN DIRECT INVESTMENT IN INDIA

The government of India earlier restricted the entry of foreign direct investment into the country but then it liberalized the country's investment regulations in the beginning of 1991. The two factors that help to make India one of the best destination for foreign direct investment are that the rate of wages in the country are much lower in comparison to the developed countries and it is the second biggest country in the whole world for it has a population of more than one billion people. The total amount of foreign direct investment in India stood at around US$ 48.2 billion from August, 1991 to December, 2006.

FLOW OF FOREIGN DIRECT INVESTMENT FROM U.S.A TO INDIA

The flow of FDI from U.S.A to India has increased at a very fast rate in the last few years and this has helped to make U.S.A one of the major countries investing in India. The total amount of FDI from U.S.A to India stood at ` 12,333.84 crores between 1991 and 2002. The total percentage of FDI from U.S.A to India came to 17.1% out of the total foreign direct investment in the country between 1991 and 2002.

RESULTS OF FDI FROM U.S.A TO INDIA

The results of FDI from U.S.A to India has proved to be beneficial for the country for it has led to the transfer of technology, creation of new opportunities for employment, and also economic growth of the country. **Foreign direct investment in India** has the fifth biggest economy in the world and the country also has such a market that offers very high prospects for earning and growth. These factors have helped to attract huge amounts of foreign direct investment in India. The total amount of foreign direct investment in India stood at US$ 4881 million in 1995- 1996 and the next year, this figure increased to US$ 6008 million. The industries that have attracted foreign direct investment in India are electrical equipments, information technology, service sector, tourism, metallurgical industries.

FDI FROM JAPAN

FDI from Japan to India has increased over the years, which in its turn have helped in the growth of the country's economy. The flow of FDI from Japan to India has increased due to the several incentives that have been provided by the Indian government.

All these measures helped to attract huge amounts of foreign direct investment in India. The various sectors that have been attracting foreign direct investment in India are cement and gypsum products, fuels, transportation industry and drugs and pharmaceuticals. The amount of foreign direct investment in India stood at US$ 2,634 million in 2003- 2004 and the next year, this figure increased to US$ 3,755 million.

FLOW OF FDI FROM JAPAN TO INDIA

FDI from Japan to India has increased over the years as a result of which Japan ranks third among all the countries that make investments in India. FDI from Japan to India came to US$ 94 million in 2003, in 2004 this figure stood at US$ 116 million, and in 2005 this figure increased to US$ 168 million. The total amount of FDI from Japan to India came to US$ 1,254.8 million between 1991 and 2002. The total percentage of FDI from Japan to India stood at 6.8% out of the total foreign direct investment in the country from 1991 to 2002

INDIAN STATES ATTRACTING FDI FROM GERMANY

There are around 630 Indo- German joint collaborations in operation in India as on 12th October, 2005. Around one third of the total Indo- German joint ventures are in operation in the Indian state of Maharashtra. The other Indian states that have attracted FDI from Germany are Karnataka, Tamil Nadu, Andhra Pradesh, and West Bengal.

PERFORMANCE OF GERMAN COMPANIES IN INDIA

Indo- German enterprises that are listed on the stock exchanges of India are reporting better performance each quarter. The listed Indo- German companies recorded a growth in sales of around 11% yearly in the quarter that ended in December, 2004. At the same time these companies reported growth in net income of about 25% yearly. In fact the Indian subsidiaries of the German enterprises are continuously performing better than their parent companies in terms of total growth in profit and sales. This has helped to boost the flow of FDI from Germany to India.

Table-1: Statement on country-wise fdi equity inflows from april, 2000 to january, 2014

S. no	Name of the Country	Amount of Foreign Direct Investment Inflows		%age with total FDI Inflows (+)
		(In Rs crore)	(In US$ million)	
1	Mauritius	365,887.14	77,778.88	36.68
2	Singapore	111,702.87	23,138.62	10.91
3	United Kingdom	100,707.80	20,735.13	9.78
4	Japan	76,267.66	15,559.10	7.34
5	U.S.A	55,202.95	11,842.21	5.59
6	Netherlands	52,754.43	10,665.03	5.03
7	Cyprus	35,162.99	7,353.38	3.47
8	Germany	30,432.39	6,329.55	2.99
9	France	18,601.77	3,861.41	1.82
10	UAE	12,713.27	2,652.14	1.25
11	Switzerland	12,392.71	2,584.49	1.22
12	Spain	8,840.39	1,774.68	0.84
13	South Korea	6,780.23	1,388.69	0.65
14	Italy	6,125.86	1,314.22	0.62
15	Hong Kong	5,770.82	1,202.36	0.57
16	Sweden	4,867.15	1,026.83	0.48
17	Cayman Islands	3,885.71	900.44	0.42
18	Luxembourg	4,671.90	872.43	0.41
19	British Virginia	3,650.99	803.67	0.38
20	Malaysia	3,232.72	634.02	0.30
Grand total				

Source: DIPP, Federal ministry of commerce and industry, govt of India

Table 1 depicts the country wise FDI inflow in India during April 2000 – January 2014. The analysis indicates that large part of FDI in India is contributed by twenty countries which is. 185506.59 US $ million while remaining aprox. Mauritius emerged as the most dominant source of FDI contributing 77,778.88 US$ million of the total investment in the country. It is because the India has Double Taxation Avoidance Agreement (DTAA) with Mauritius. This (DTAA) type of taxation treaty has been made out with Singapore .So Singapore is second largest Investor of FDI inflow in India. The other major countries are U.K with a relative share 20,735.13 US$ million followed by Japan. While some countries like South Korea, Italy, Hong Kong has fewer shares in total FDI Inflow.

SECTORS –WISE ATTRACTING THE INFLOWS IN INDIA:

This paper explains the sector –wise attracting inflows in India these are all sectors are developed and use full of increased India economic growth.

INFRASTRUCTURE

In 2011, the number of FDI projects in infrastructure sector in India grew by 90 percent, which contributes 4 percent to the entire FDI projects and 9 percent of the total jobs created due to FDI. Government of India plans to increase its infrastructure by spending U.S. $1 trillion by 2017, which is only U.S. $500 billion now. “The government now needs to follow up these reforms by resolving actual implementation bottlenecks on the ground - especially as they relate to the infrastructure sector”, adds Banerjee. **Automotive** The automotive industry in India is one of the largest in the world and one of the fastest growing globally. Indian automotive industry is the sixth largest vehicle manufacturing industry in the world.

RETAIL AND CONSUMER PRODUCTS

The number FDI deals in the consumer products sector grew by 31 percent in 2011. This particular sector contributes 10 percent to the entire FDI projects and has created nearly 28,400 jobs. The government's decision to attract FDI into various sectors - especially in multi-brand retail - is a very positive move. While it will be several quarters before things on the ground change, the series of moves announced last week are very important to boost investor confidence, create the notion that the country is open for business again and possibly avert a ratings downgrade," says Sajjid Chinoy, India Economist, JP Morgan. **Technology** In the recent years, technology sector in India has implied a major impact on the Indian economy and has grown hugely. It has jumped from U.S. $4 billion in 1998 to U.S. $80 in 2011. During this period this sector has employed more than 10 million people, directly or indirectly.

Table-2: Statement on sector-wise fdi equity inflows from april, 2000 to january, 2014

S. No	Sector	Amount of FDI inflows		%age with total FDI inflows (+)
		(in Rs crore)	(in us$ million)	
1	Services sector*	182,955.00	39,038.84	18.41
2	Construction development: townships, housing, built-up infrastructure and construction-development projects	106,962.74	23,046.61	10.87
3	Telecommunications	59,795.49	13,028.23	6.14
4	Computer software & hardware	59,013.92	12,710.96	5.99
5	Drugs & pharmaceuticals	56,007.75	11,587.28	5.46
6	Chemicals (other than fertilizers)	43,445.50	9,376.47	4.42
7	Automobile industry	45,313.62	9,344.37	4.41
8	Power	40,417.60	8,538.00	4.03
9	Metallurgical industries	37,412.94	7,938.95	3.74
10	Hotel & tourism	35,565.83	7,013.29	3.31
11	Petroleum & natural gas	25,471.73	5,491.29	2.59
12	Food processing industries	31,118.30	5,360.89	2.53
13	Trading	21,795.58	4,475.10	2.11
14	Information & broadcasting (including print media)	18,021.93	3,708.13	1.75
15	Electrical equipments	15,376.64	3,300.42	1.56
16	Non-conventional energy	14,884.75	2,922.31	1.38
17	Cement and gypsum products	13,370.32	2,880.43	1.36
18	Industrial machinery	13,743.00	2,752.20	1.30
19	Miscellaneous mechanical & engineering industries	12,152.44	2,593.26	1.22
20	Construction (infrastructure) activities	11,312.13	2,355.25	1.11

Source: DIPP, Federal Ministry of commerce and industry

Table 2 clearly shows the FDI inflows in different sector for the period April 2000 to January 2014 data reveals that most of the foreign countries like to invest in the service sector. Services sector includes Financial, Banking, Insurance, nonfinancial / Business etc. Share of Service sector in total FDI is 18.41 per cent. The second largest share of FDI is in the construction development. Large amount of FDI has also taken place in telecommunication sector. The telecom industry has now become one of the fastest growing industries in India. Some Sector like Information & Broadcasting, Electrical Equipment attracts less FDI in the country.

CONCLUSION

India emerges as the fifth largest recipient of foreign direct investment across the world. India is considered second largest country amongst all further developing countries and ranks fourth in the PPP in the world. So India has high potential to attract the FDI inflow. The present study found that total FDI inflow in India from April 2000 to January 2013 is 311,398 US$ million. The study also reveals that Mauritius emerged as the most dominant source of FDI contributing 77,083.47 US$ million of the total investment in the country. The Large part of FDI in India is contributed by fifteen countries which is 185506.59 US $ million. The services sector accounted for a steeply rising share of FDI stocks in India followed by construction development, Telecommunications and Computer Software & Hardwar.

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NSE'S RETURN PARAMETER IN INDIA- AN EMPIRICAL ANALYSIS

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ABSTRACT
In our Indian financial system, the capital market has played a more vibrant and versatile role ineconomic development. In the recent scenario, long terminvestors are showing more interest ininvesting in the companies through capital market to attain more profit. In India listed stock exchanges are Bombay Stock Exchange (BSE), National Stock Exchange (NSE) and the Calcutta Stock Exchange (CSE). In this capital market, the volatility is shown as astatistical measureof the dispersion of returns for a given security to the investors. Commonly, the higher range of volatility is a symbol of greater riskassociated with the security. Volatility estimation is one of the important parameter for several reasons which associated with different kind of people in the capital market. In this paper, the researcher has analyzed the presence of volatility over the period of last 10 years of 2008-2017 in the NSE Nifty returns with the use of ARCH (1,1), ARCH-LM (1,1,), GARCH (1, 1), GARCH-LM (1, 1) models to estimate the NSE Nifty index return series with the use of E-views.

Keywords: Volatility, NSE Nifty, Return, ARCH, GARCH

INTRODUCTION

In India, the modeling of asset return volatility continues to be one of the key areas of financial research as it provides substantial information on the risk patterns involved in investment and transaction processes. Given the fact that stock market normally exhibits a high level of price volatility in India, which lead to unpredictable outcomes. Volatility may be measured by the standard deviation of daily price changes, or as a by-product of estimation of an econometric unpredictable model which is called a volatility model. The typical approach to volatility model is through the so-called GARCH class of ARCH models. Volatility directly or indirectly controls asset return series, equity share prices and the other important one is foreign exchange rates. Pricing of securities depends on volatility of each and every asset. Raising of volatility in stock market brings a large stock price change of advances or declines. Investors are interpreting a raise in stock market volatility as an increase in the risk of equity investment and consequently they shift their funds to less risky assets. Here, the researcher has employed ARCH (1,1), ARCH-LM (1,1,), GARCH (1, 1), GARCH-LM (1, 1) models to estimate the NSE Nifty index return series with the use of E-views.

REVIEW OF LITERATURE

Share price volatility and the active character of capital market returns are important practical phenomena in financial markets and a multitude of studies have been carried out to examine them. In his study, Engle (1982) formulate the ARCH model to compute time-changeable volatility, by expressing the variance forecast in terms of the most recent squared prices.

Bekaert and Harvey (2000) analyzed equity returns in a group ofemerging markets before and after financial reforms. The observed studies investigate the volatility of returns have yield mixed judgements. Aggarwal, Inclan and Leal(1999) analyze volatility in emerging capital markets during 1985-95. A common claim of all these studies is that, the proposition that liberalizationincreases volatility is not supported by experimentalfacts. Levine and Zervos(1995) propose that volatility may increase after liberalization.As is evident from the survey of literature discuss above, the matter of changesin stock price volatility returns on account of capital market liberalization in rising markets has received significant thought in current years. Nicholas et al (2011) analysed the affiliation between stock returns and volatility for the three major capital markets in Europe. They found that volatility change for greater part of the stocks rapidly during the crisis period with changes being constant. They also found that before the calamityadded investors are rewarded for market wide risk and during the crisis less stocks exhibit a positive relationship between stock returns and volatility. Finally, they find that majority of stocks were don't exhibit positive and statistically significant leverage effects. Sarkar and Banerjee (2006) evaluate the volatility in the daily return at five-minute interval of the Indian National Stock Exchange from June 1, 2000 through January 30, 2004. They find that our Indian stock market experience volatility clustering and hence GARCH model predict the market volatility better than simple volatility models like pastnormal, affecting average etc. They also monitor that the asymmetric GARCH models provide better fit than the symmetric GARCH model, confirm the company of influencedoutcome Finally, the study discloses that the modify in volume of trade in the market directly affects the volatility of asset proceeds. Further, the being there of FII in the Indian stock market does not appear to increase the overall market volatility.

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OBJECTIVES OF THE STUDY

1. To analyse the retun parameters of NSE
2. To gauge the presence of volatility in the Nifty returns.

HYPOTHESES OF THE STUDY

H_{01}: There is no ARCH effect in the residual series.

H_{02}: There is no GARCH effect in the residual series.

RESEARCH METHODOLOGY

This research study having certain assumption, investment is based on risk retun association with the market. The overall implication of the study justify through empirical nature. In this study the researcher has used the daily returns of NSE Nifty 50 index for the period of 01-01-2008 to 31-12-2017. The sample size consists of 2473 daily observations from closing price excluding public holidays. The main aim of this study is to examine thepresence of volatility in Nifty returns in NSE. Therefore, the present study based on the Descriptive statistics, Unit root test, and the time series of daily returns on the Nifty Index is modelled as a univariate GARCH process, which areARCH (1,1), ARCH-LM (1,1,), GARCH (1, 1), GARCH-LM (1, 1) models are estimated for the NSE Nifty index return series using the E-views. The daily closing index data are obtained from the website of NSE and converted to daily compounded returns by taking the first log difference and calculated on the basis of the following

$$r(t) = \boxed{\frac{\text{Price }(t+1) - \text{Price }(t)}{\text{Price }(t)}} \quad \boxed{\frac{\text{Price }(t+1)}{\text{Price }(t)}} \; 1 \text{ --------------(1)}$$

Here r(t) represents the return series, which is being calculated from the price series price(t).

The expected return μ is planned from the return series as:

$$\mu = \boxed{\frac{\sum r(t)}{n}} \quad \text{---(2)}$$

ANALYSIS AND INTERPRETATION

Table – 1: Descriptive statistics of NIFTY 50 Index return

Variance	RN
Mean	0.000320
Median	0.000491
Maximum	0.177441
Minimum	-0.122029
Std. Dev.	0.014314
Skewness	0.411390
Kurtosis	17.70579
Jarque-Bera	22353.58
Probability	0.000000
Sum	0.791405
Sum Sq. Dev.	0.506472
Observations	2473

Source: Computed by author through E-views

Table 1 provides the descriptive statistics of the daily returns for the NSE Nifty 50 index for the period selected for this study. There are totally 2,473 observations. The Nifty Index has a mean return vary from -0.122029 to 0.177441 thereby stating that there is wide fluctuation in the daily returns of the Nifty Index. The mean return for the entire period is 0.0000320 which is close to zero. The standard deviations degree suggests 0.014314 comparatively risks in financial series of Nifty 50 index. It is very significant that skewness represents non-negative returns but hardly on border 0.411390 level while the kurtosis represents much high degree compared

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to the standard level. That indicateoptimistic news for investor and an evidence of good returns during these ten years study. This higher degree of kurtosis 17.70579 which is in excess of 3 indicates heavy tails and the distribution is leptokurtic. The findings are similar to that of the existing literature and with a high Jarque-Bera statistic, it can be established that the returns sequence is not normally distributedand indicate the presence of heteroscedasticity. Hence, GARCH model is appropriate for easy for testing the above hypothesis.

Table – 2: Unit Root Test

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-46.87588	0.0001
Test critical values:	1% level	-3.432801	
	5% level	-2.862509	
	10% level	-2.567331	
*MacKinnon (1996) one-sided p-values.			

Source: Computed by author through E-views

The above table explains the unit root test to examine the time series properties of worried variables. Unit root test describe whether a series is stationary or non- stationary. For this test the study employs the Augmented Dickey-Fuller test. A DF is used to compute the stationarity of time series data, which in turn tells whether regression can be done on the data, or not. And it is also observed that the Augmented Dickey-Fuller test statisticcalculated value is -46.87588. The p= 0.001 is less than one per cent level of significance. Hence, this is significant @ 1% and hence it can be concluded that the variable of Nifty 50 index returns is stationary at this level.

H0: There is no ARCH effect in the residual series.

Table – 3: Results of ARCH Effect

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000320	0.000288	1.111817	0.2663
R-squared	0.000000	Mean dependent var		0.000320
Adjusted R-squared	0.000000	S.D. dependent var		0.014314
S.E. of regression	0.014314	Akaike info criterion		-5.654787
Sum squared resid	0.506472	Schwarz criterion		-5.652436
Log likelihood	6993.144	Hannan-Quinn criter.		-5.653933
Durbin-Watson stat	1.883057			

Source: Computed by author through E-views

In this case, the researcher first employ an autoregressive moving average ARMA (1,1) model for the conditional mean in the return series as an initial regression, then, test of the hypothesis is revealed that there is no any ARCH results in the residual series from lag 1 up to lag 5.

Table – 4: ARCH LM results for residuals of Nifty 50 Returns

Heteroskedasticity Test: ARCH			
F-statistic	29.48955	Prob. F(1,2470)	0.0000
Obs*R-squared	29.16523	Prob. Chi-Square(1)	0.0000

Source: Computed by author through E-views

Table 4 has explains about the LM Test to estimate ARCH/GARCH effects in the series. The results obtained are shown in Table 4. It can be seen that both the *F* statistic and the LM statistic are very significant and it provides strong evidence for rejecting the null hypothesis for all lags included. Rejecting is an indication of the existence of ARCH effects in the residuals series and therefore the variance of the return series of Nifty index returns is non-constant for all periods specified.

Table – 5: GARCH (1,1) Results

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	0.000690	0.000195	3.546002	0.0004

	Variance Equation			
C	1.15E-06	2.66E-07	4.312331	0.0000
RESID(-1)^2	0.082381	0.006551	12.57557	0.0000
GARCH(-1)	0.914120	0.006798	134.4734	0.0000
R-squared	-0.000667	Mean dependent var		0.000320
Adjusted R-squared	-0.000667	S.D. dependent var		0.014314
S.E. of regression	0.014319	Akaike info criterion		-6.108952
Sum squared resid	0.506810	Schwarz criterion		-6.099549
Log likelihood	7557.719	Hannan-Quinn criter.		-6.105536
Durbin-Watson stat	1.881801			

Source: Computed by author through E-views

Table 5 shows GARCH (1,1) model. The stationary data series is used to compute GARCH (1, 1) to estimate the volatility for Nifty 50 index return and the model fitted well on financial series. The model is statistically significant @ 1 %. The variance equation were calculate by 0.082381+ 0.914120 <1 and very close to 1 indicates the extent to which a volatility shock is persistent over time. A persistent volatility shock raises the asset price volatility. A large sum of coefficients implies that a large positive or a large negative returns leads to high future forecast variance and it would be profitable and may generate high degree of returns for a long period.

Table – 6: GARCH - LM (1,1) results for residuals of Nifty 50 returns

Heteroskedasticity Test: ARCH			
F-statistic	0.159820	Prob. F(1,2470)	0.6894
Obs*R-squared	0.159939	Prob. Chi-Square(1)	0.6892

Source: Computed by author through E-views

Table 6, has shown the *F* statistic and LM statistic which are not significant and it is an indication that there is an absence in ARCH effects in the residuals series and therefore the variance of the return series is constant for all specified periods.

DISCUSSION & CONCLUSION

Stock Market is the mitigation of risk through the spreading ofinvestments across multiple entities, which is achieved by thepooling of a number of small investments into a large bucket. This studyhas finds that there exists a significant presence of volatility and degree of volatility is persistent which implies the recent news as well as past news both has an impact on volatility.In this study, we have examined the time varying pattern of NSE nifty return volatility in India over the period 2008-2017 using the data of niftydaily returns and measured the high accuracy using different distributions of GARCH techniques.

The volatility was given as input for GARCH techniques with different distribution parameter. In this paper, we model the volatility of Nifty, an index of 50 stocks of the NSE, Mumbai, using different class of estimators and models.As far as ARCH models are concerned, we have used relatively basic conditional volatility models.

LIMITATION & SCOPE FOR FURTHER RESEARCH

In this study, the researcher has taken into considered the Nifty 50 index alone. There are other indices also available at NSE namely, Nifty next 50, Nifty 100, Nifty 200, Nifty 500 etc. In future, the same volatility study can move forward with these indices by the other researchers. Here, we stick with the 10 year period of 2008-2017 to measure the volatility presence, but the study can also do with the period 1992, when the NSE was started in India as one of the major stock exchanges or any particular event can be studied to find the leverage effect on that specific event.

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Track – 2

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CHILD ABUSE –BREAK THE SILENCE

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ABSTRACT

Child abuse or child maltreatment is physical, sexual, or psychological maltreatment or neglect of a child or children, especially by a parent or other caregiver. Child abuse may include any act or failure to act by a parent or other caregiver that results in actual or potential harm to a child, and can occur in a child's home, or in the organizations, schools or communities the child interacts with.

The terms child abuse and child maltreatment are often used interchangeably, although some researchers make a distinction between them, treating child maltreatment as an umbrella term to cover neglect, exploitation, and trafficking.

Keywords: Child, Child Abuse, Maltreatment, Neglect, Exploitation, Trafficking.

WHAT IS CHILD ABUSE?

When a perpetrator intentionally harms a minor physically, psychologically, sexually, or by acts of neglect, the crime is known as child abuse.

According to UNICEF violence against children can be "physical and mental abuse and injury, neglect or negligent treatment, exploitation and sexual abuse. Violence may take place in homes, schools, orphanages, residential care facilities, on the streets, in the workplace, in prisons and in places of detention." Such violence can affect the normal development of a child impairing their mental, physical and social being. In extreme cases abuse of a child can result in death.

Child abuse is widespread and can occur in any cultural, ethnic, or income group. Child abuse can be physical, emotional, verbal, or sexual. It can also result from neglect. Abuse can result in serious injury to the child and possibly even death. Physical abuse involves non-accidental harming of a child by, for example, burning, beating, or breaking bone. Verbal abuse involves harming a child by, for example, belittling them or threatening physical or sexual acts. Emotional trauma can result from several forms of abuse.

Child abuse can be categorised into four different types: neglect, emotional abuse, physical abuse and sexual abuse. A child may be subjected to one or more forms of abuse at any given time. Abuse and neglect can occur within the family, in the community or in an institutional setting. The abuser may be someone known to the child or a stranger, and can be an adult, or another child in a situation where abuse is alleged to have been carried out by another child.

DIFFERENT FORMS OF CHILD ABUSE

Child abuse has many forms: physical, emotional, sexual, neglect, and exploitation. Any of these that are potentially or actually harmful to a child's health, survival, dignity and development are abuse.

Neglect

Neglect occurs when a child does not receive adequate care or supervision to the extent that the child is harmed physically or developmentally. It is generally defined in terms of an omission of care, where a child’s health, development or welfare is impaired by being deprived of food, clothing, warmth, hygiene, medical care, intellectual stimulation or supervision and safety. Emotional neglect may also lead to the child having attachment difficulties.

The following are features of child neglect

- Children being left alone without adequate care and supervision
- Malnourishment, lacking food, unsuitable food or erratic feeding
- Non-organic failure to thrive, i.e. a child not gaining weight due not only to malnutrition but also emotional deprivation
- Failure to provide adequate care for the child’s medical and developmental needs, including intellectual stimulation
- Inadequate living conditions – unhygienic conditions, environmental issues, including lack of adequate heating and furniture.

- Lack of adequate clothing
- Inattention to basic hygiene
- Lack of protection and exposure to danger, including moral danger, or lack of supervision appropriate to the child's age
- Persistent failure to attend school
- Abandonment or desertion

EMOTIONAL ABUSE

Emotional abuse is the systematic emotional or psychological ill-treatment of a child as part of the overall relationship between a caregiver and a child.

Abuse occurs when a child's basic need for attention, affection, approval, consistency and security are not met, due to incapacity or indifference from their parent or caregiver. Emotional abuse can also occur when adults responsible for taking care of children are unaware of and unable (for a range of reasons) to meet their children's emotional and developmental needs. Emotional abuse is not easy to recognise because the effects are not easily seen.

Emotional abuse may be seen in some of the following ways

- Rejection
- Lack of comfort and love
- Lack of attachment
- Lack of proper stimulation (e.g. fun and play)
- Lack of continuity of care (e.g. frequent moves, particularly unplanned)
- Continuous lack of praise and encouragement
- Persistent criticism, sarcasm, hostility or blaming of the child
- Extreme overprotectiveness
- Inappropriate non-physical punishment (e.g. locking child in bedroom)
- Ongoing family conflicts and family violence
- Seriously inappropriate expectations of a child relative to his/her age and stage of development.

PHYSICAL ABUSE

Physical abuse is when someone deliberately hurts a child physically or puts them at risk of being physically hurt. It may occur as a single incident or as a pattern of incidents. A reasonable concern exists where the child's health and/ or development is, may be, or has been damaged as a result of suspected physical abuse.

Physical abuse can include the following

- Physical punishment
- Beating, slapping, hitting or kicking
- Pushing, shaking or throwing
- Pinching, biting, choking or hair-pulling
- Deliberate poisoning
- Suffocation
- Fabricated/induced illness
- Female genital mutilation

SEXUAL ABUSE

Sexual abuse occurs when a child is used by another person for his or her gratification or arousal, or for that of others. It includes the child being involved in sexual acts (masturbation, fondling, oral or penetrative sex) or exposing the child to sexual activity directly or through pornography.

Child sexual abuse may cover a wide spectrum of abusive activities. It rarely involves just a single incident and, in some instances, occurs over a number of years. Child sexual abuse most commonly happens within the family, including older siblings and extended family members.

Examples of child sexual abuse include the following

- Any sexual act intentionally performed in the presence of a child
- An invitation to sexual touching or intentional touching or molesting of a child's body whether by a person or object for the purpose of sexual arousal or gratification
- Masturbation in the presence of a child or the involvement of a child in an act of masturbation
- Sexual intercourse with a child, whether oral, vaginal or anal
- Sexual exploitation of a child, which includes:
  - Inviting, inducing or coercing a child to engage in prostitution or the production of child pornography [for example, exhibition, modelling or posing for the purpose of sexual arousal, gratification or sexual act, including its recording (on film, videotape or other media) or the manipulation, for those purposes, of an image by computer or other means]
  - Inviting, coercing or inducing a child to participate in, or to observe, any sexual, indecent or obscene act
  - Showing sexually explicit material to children, which is often a feature of the 'grooming' process by perpetrators of abuse
- Exposing a child to inappropriate or abusive material through information and communication technology
- Consensual sexual activity involving an adult and an underage person

LEGAL PROVISIONS FOR PROTECTION OF CHILDREN

INTERNATIONAL CONVENTIONS AND DECLARATIONS

India has signed a number of international documents and declarations that pertain to the rights of the children. The United Nations Convention on the Rights of the Child (UN CRC) was assented to by India in 1992. In 2005, the Government of India accepted the two Optional Protocols to the UN CRC, addressing the involvement of children in armed conflict and the sale of children, child prostitution and child pornography.

India also signed the International Conventions on Civil and Political Rights, and on Economic, Social and Cultural Rights. India is also a signatory to the Convention on the Rights of the Child (CRC) adopted by the UN General Assembly in 1989 prescribing standards to be adhered to by all State parties in securing the best interest of the child and outlines the fundamental rights of children,

Convention on the Elimination of All Forms of Discrimination against Women **(CEDAW)** also applicable to girls under 18 years of age and the SAARC Convention on Prevention and Combating Trafficking in Women and Children for Prostitution.

CONSTITUTION OF INDIA

The Constitution of India contains a number of provisions for the protection and welfare of the children. It has empowered the legislature to make special laws and policies to safeguard the rights of the children. **Articles 14, 15, 15(3), 19(1) (a), 21, 21(A), 23, 24, 39(e) 39(f) of the Constitution of India** contain provisions for the protection, safety, security and well-being of all its people, including children.

National Policies

The major policies that have been formulated to ensure child rights and improvement in their status are

- National Policy for Children, 1974
- National Policy on Education, 1986
- National Policy on Child Labour, 1987
- Report of the Committee on Prostitution, Child Prostitutes and Children of Prostitutes and Plan of Action to Combat Trafficking and Commercial Sexual Exploitation of Women and Children, 1998

STATUTES DEALING WITH THE PROTECTION OF CHILDREN

Following Acts were enacted for the welfare and protection of the rights of the children

1. The Indian Penal Code, 1860

- Foeticide (Sections 315 and 316)
- Infanticide (Section 315)
- Abatement of Suicide: Abatement to commit suicide of minor (Section 305)

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- Exposure and Abandonment: Crime against children by parents or others to expose or to leave them with the intention of abandonment (Section 317)
- Kidnapping and Abduction (Section 360 to Section 369)
- Procurement of minor girls by inducement or by force to seduce or have illicit intercourse (Section 366-A)
- Selling of girls for prostitution (Section 372)
- Buying of girls for prostitution (Section 373)
- Rape (Section 376)
- Unnatural Sex (Section 377)

2. The Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994y, 2002
This is an Act for the regulation of the use of pre-natal diagnostic techniques and for the prevention of misuse of such techniques for the purpose of prenatal sex determination leading to female foeticide and for matters connected therewith or incidental thereto.

3. The Juvenile Justice (Care and Protection of Children) Act, 2000
The Juvenile Justice (Care and Protection of Children) Act, 2000 provides for proper care, protection and treatment of children in conflict with law and children in need of care and protection by catering to their development needs, and by adopting a child friendly approach in the adjudication and disposition of matters in the best interest of children and for their ultimate rehabilitation through various institutions established under the Act.

5. Child Labour (Prohibition and Regulation) Act, 1986
The Child Labour (Prohibition and Regulation) Act, 1986Act provides for elimination of child labour and provides for punishments and penalties for employing children below the age of 14 years in various hazardous occupations and processes.

6. The Prohibition of Child Marriage Act, 2006
The Prohibition of Child Marriage Act, 2006 was enacted to put a stop to the practice of child marriages in India. For marriages already contracted, it says that every child marriage shall be voidable at the option of the contracting party who was a child at the time of the marriage.

7. The Commissions for the Protection of Child Rights Act, 2005
The Act provides for the Constitution of a National and State Commissions for protection of Child Rights in every State and Union Territory.

8. The Protection of Children from Sexual Offenses (POCSO) Act
The Protection of Children from Sexual Offences (POCSO) Act, 2012 was enacted to provide a robust legal framework for the protection of children from offences of sexual assault, sexual harassment and pornography, while safeguarding the interest of the child at every stage of the judicial process. The framing of the Act seeks to put children first by making it easy to use by including mechanisms for child-friendly reporting, recording of evidence, investigation and speedy trial of offences through designated Special Courts.

CONCLUSION
One of the biggest social stigmas attached to a society is that of child abuse. . The growing complexities of life and the changed social economic conditions have exposed the children to new and different forms of abuse. But the sad state of the affairs is that such heinous acts are reported less. It has such a psychological impact on the mind of the child that he seldom gathers the courage to speak about the act being committed against him. If even if he confides the fact with someone, the social factors let the fact being dumped under the fear of family reputation and other related issues. In fact, child abuse is a violation of the basic human rights of a child. The prospects for change led by law may be limited because children's status depends on altering the connections between the family, society, and the economy more broadly. In this sense, realizing children's rights remains contingent on other social changes.

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A STUDY ON IMPACT OF CONSUMER TRUST BUILDING MEASURES ADOPTED BY ECOMMERCE COMPANIES– WITH REFERENCE TO CHENNAI CITY

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ABSTRACT

Indian Constitution as a well defined established law – Consumer Protection Act which was set up in 1986 by parliament of India in lieu of protecting the interest of Indian Consumers. The Consumer protection laws have been designed for the safety and transparency of the information in the market. The importance of consumer protection act against manipulation caused due to unfair trade, Health and safety of the consumers and ensuring right against selection of varied offers. Now it is Smart phone generation and E-commerce has changed the shopping pattern. Customer base and revenue of E-Commerce industry is steadily increasing year on year in India which enabled E-Commerce companies could require these platforms to register with the consumer affairs department and the companies would also have to disclose their business details and seller agreements as per the proposed consumer protection Act 2018. This paper is an attempt to identify consumer experience in E-Commerce market place with reference to offers, Size Variants, Return policy, and Offers.

For this a sample size of 125 has been chosen from Chennai city through convenience sampling and the result shows that there is a system in place with most of Leading E-Commerce platform with reference to Return policy, COD, Size disputes and addressing issues. At the same time customers also feel that big day offers etc where customers are not very happy since they are not able to utilize the offers which are highlighted in Promotional campaigns.

Keyword: E-Commerce Consumers Act, Online offers, COD, Return Policies, Size Variance

INTRODUCTION

“A customer is the most important visitor on our premises. He is not dependent on us. We are dependent on him. He is not an interruption of our work. He is the purpose of it. He is not an outsider of our business. He is part of it. We are not doing him a favour by serving him. He is doing us a favour by giving us the opportunity to do so.” From the Words of the Father of our Nation Mahatma Gandhiji We could understand the importance of the consumers in the cycle of the Business. And the constitution has a well-established Law for protecting the rights of the consumers.

The Consumer Protection Bill, 2017 which was approved by the Union Cabinet last year (as already discussed in our previous titled "India: The Union Cabinet Approves The Consumer Protection Bill, 2017"1, dated January 15, 2018 as there is a need to update the Consumer Protection Act, 1986 (hereinafter referred to as the 'Act'). The Consumer Protection Bill, 2018 (hereinafter referred to as the 'Bill') is slated to be the next big thing for the consumers. The said Bill was originally drafted in 2015 and placed before the Lok Sabha (Lower House) in 2016 and subsequently sent to the Standing Committee on Food and Consumer Affairs. The Bill is important because the new Bill is expected to completely overhaul the current laws stipulated under the Consumer Protection Act, 1986.

The Consumer Protection Bill, 2018 proposes the following new amendments with related to E-Commerce:

To address emergence of global supply chains, rapid development of e-commerce and to tackle misleading advertisements, telemarketing, multi-level marketing and direct selling the Bill also attempts to define e-commerce. At the same time, it endeavours to empower the Centre to make rules for preventing unfair trade practices in online trade.

Today is the world of ecommerce and we what witnessing the growth of the industry year on year. As per an ASSOCHAM-Resurgent joint study, online shopping is expected to clock annualised growth of 115 percent this year, aided by fast-increasing data consumption and improvement in logistics, along with a number of offers presented by e-commerce platforms.

Some Promotions followed by E-commerce companies to attract new customers

1) COD-Cash on Delivery
2) Return Policy
3) Refund Policy
4) Grand Offers

5) Product Return etc

OBJECTIVE OF THE STUDY

- ✓ To identify the consumer profile of the E-Commerce
- ✓ To examine the satisfaction of the consumer on various facilities provided by ecommerce companies to win the trust
- ✓ To understand the areas to focus to improve the trust further

REVIEW OF LITERATURE

Debansu Chatterjee & Indrajit Ghosal (2014) The present study has been undertaken to describe the present status and facilitators of E-Commerce in India, analyze the present trends of E-Commerce in India and examine the barriers of E-Commerce in India and the Overall E-Commerce will increase exponentially in coming years in the emerging market of India

Kashif Kaularikar & Dipti Patil (2013) This paper suggests a scenario which replaces typical scenario of 'shop first, pay later', with 'shop as per your money capability' using online money transfer on existing money transfer network. It creates guarantee of payment at end of the transaction to seller. Also, it will filter out all window shoppers and allows only interested 'capable' buyers to stay in auction process.

RESEARCH METHODOLOGY

The primary objective of the study was to Impact of Consumer trust building Measures adopted by Ecommerce Companies. The research design for this study is descriptive in nature. Data were collected based on the convenience Sampling. A Sample of 125 respondents from with various age groups and gender were collected. Data Collected during a period of October 2018

DATA ANALYSIS AND INTERPRETATION

Table No-1: Demographic Profile

Categories	Factors	Frequency	Percentage
Age of the Respondents	20-25	29	23.2
	25-30	41	32.8
	30-35	33	26.4
	Above 35	22	17.6
Gender	Male	96	76.8
	Female	29	23.2
Qualification	Graduation	36	28.8
	Post Graduate	40	32.0
	Professional Courses	29	23.2
	Others	20	16.0
Profession	Private Employer	32	25.6
	Government Employee	32	25.6
	Business	52	41.6
	Others	9	7.2
Income of the Respondent	15000-20000	17	13.6
	20001-25000	46	36.8
	25001-30000	44	35.2
	Above 30001	18	14.4

The above table reveals that most of the respondents (41%) falls under the age group of 25-30 and the Majority of the respondents are Male (76%) It is also to be noted that majority of respondents have completed post graduation (32%) and 41% of the respondents are self employed and with majority of them (36.8%) has the income level of 25001-35000

Table No-2: Relationship between Income of the respondents and Frequency of Buying Online

Null Hypothesis (Ho): There is no significant relationship between Income of the respondents and Frequency of Buying Online

Alternative Hypothesis (H1): There is significant relationship between Income of the respondents and Frequency of Buying Online

The Chi-square test has been employed to examine the hypothesis and the computed results are presented in Table 2.

Income of the Respondent * Purchase frequency								
			Purchase Frequency					**Total**
			Monthly once	**Monthly twice**	**Weekly once**	**Very often**	**When there is a need**	
Income of the Respondent	15000-25000	Count	1	5	6	5	0	17
		% within Income of the Respondent	5.9%	29.4%	35.3%	29.4%	0.0%	100.0%
		% within Purchase frequency	12.5%	10.0%	20.7%	20.8%	0.0%	13.6%
		% of Total	0.8%	4.0%	4.8%	4.0%	0.0%	13.6%
	25001-35000	Count	3	20	8	9	6	46
		% within Income of the Respondent	6.5%	43.5%	17.4%	19.6%	13.0%	100.0%
		% within Purchase frequency	37.5%	40.0%	27.6%	37.5%	42.9%	36.8%
		% of Total	2.4%	16.0%	6.4%	7.2%	4.8%	36.8%
	35001- 45000	Count	2	16	13	6	7	44
		% within Income of the Respondent	4.5%	36.4%	29.5%	13.6%	15.9%	100.0%
		% within Purchase frequency	25.0%	32.0%	44.8%	25.0%	50.0%	35.2%
		% of Total	1.6%	12.8%	10.4%	4.8%	5.6%	35.2%
	Above 45001	Count	2	9	2	4	1	18
		% within Income of the Respondent	11.1%	50.0%	11.1%	22.2%	5.6%	100.0%
		% within Purchase frequency	25.0%	18.0%	6.9%	16.7%	7.1%	14.4%
		% of Total	1.6%	7.2%	1.6%	3.2%	0.8%	14.4%
Total		Count	8	50	29	24	14	125
		% within Income of the Respondent	6.4%	40.0%	23.2%	19.2%	11.2%	100.0%
		% within Purchase frequence	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	6.4%	40.0%	23.2%	19.2%	11.2%	100.0%

Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	10.866[a]	12	.540
Likelihood Ratio	12.782	12	.385
Linear-by-Linear Association	.187	1	.666
N of Valid Cases	125		

The above table reveals that the frequency table predict the significant P-value is more than table value 0.05 hence the null hypothesis is rejected, and it is concluded that there is a significant relationship between Income of the respondents and Frequency of Buying Online.

REGRESSION MODEL

Table No-3: Regression Model to Find the Acceptance of offers promoted by online Companies

Co - efficient						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.218	.190		11.668	.000
	Genuine offer	.017	.063	.025	.276	.783

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The table exhibit that the coefficient shows how many are Acceptance of offers as genuine offers increases for a single unit increase in each predictor. Like so, 1 point increase on the Profession tests corresponds to 0.19 points increase on the understating of Acceptance of offers as genuine offers. Given only the scores on our predictors, we can predict Acceptance of offers as genuine offers soap by computing.

The column "Sig." holds the significance levels for our predictors. As a rule of thumb, we say that a b coefficient is statistically significant if its p-value is *smaller than 0.05.* All of our coefficients are statistically significant

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.025[a]	.001	-.008	1.052

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.084	1	.084	.076	.783[b]
	Residual	136.204	123	1.107		
	Total	136.288	124			

As our model predicts Acceptance of offers as genuine offers. R denotes the correlation between predicted and observed Performance. In our case, R = 0.25. Since this is a very high correlation, our model predicts Acceptance of offers as genuine offers rather precisely.

R square is simply the square of R. It indicates the proportion of variance in Understanding of Cold Pressed Soap that can be "explained" by our three predictors. Because regression maximizes R square for our sample, it will be somewhat lower for the entire population, a phenomenon known as shrinkage. The adjusted R square estimates the population R square for our model and thus gives a more realistic indication of its predictive power.

FINDINGS

- ✓ Majority of the respondents felt offers is an important influencer for buying online
- ✓ It is also identified that people feel that replacement procedure are helpful but at times it is a challenging factor.
- ✓ Majority of the respondents felt that the issues were rectified in online purchase by ecommerce companies
- ✓ Respondents has a clarity in the refund process
- ✓ Respondents of the study area feels that offers promoted at times were difficult to buy and also there is quality variation in some time on the products that are promoted during grand offers.
- ✓ Majority of the respondents felt that online companies a provision to raise concerns and also getting rectified.

CONCLUSION

Internet is with no doubt going to stay long and it is going to be one of the important channels for business development at the same because of the E-Revolution customers is also getting benefited by multiple choices of products, attractive offers and convenient shopping etc. This work has given us some light on the customer opinion on the trust measuring factors like COD, return policies etc. It is identified that customers have clarity with reference to return policies etc and there are clear policies drafted by ecommerce companies at the same time customers are not very satisfied with offers and product quality on the aggressive offers. Going forward is Ecommerce companies focused on this aspect undoubtedly Ecommerce is one of the bones for the Indian customers

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SIGNIFICANT ROLE OF E–GOVERNANCE TOWARDS VARIOUS SECTORS FOR NATION BUILDING

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ABSTRACT
E-governance is the delivery of national or local government information and services via the Internet or other digital means to citizens or businesses or other governmental agencies. E-governance is a one-stop Internet gateway to assess government services. It facilitates the provision of government information in electronic form to the citizens as and when required. It ensures better service delivery, empowerment through access to information without the bureaucracy. E-Governance refers to how managers and supervisors utilize Information Technology and Internet to execute their functions of supervising, planning, organizing, coordinating, and staffing effectively.

Keywords: E-Governance, Internet Gateway, Empowerment, Information Technology.

1. INTRODUCTION
Since few years, there has been a marked increase in the number of government organizations that are making the use of information technology and e-governance related computer applications. The ease of duplication and transmission of data across the Internet has saved tremendous time of users. All e-governance applications use government-as-a-platform to interact with the citizens and this has led to convergence between various information systems. Hence there is a need of uniformity, coordination among the functions and different departments to bridge the gaps by avoiding duplicate or ambiguity. It is not easy to virtualize a cluster of servers and doing alterations in organization strategy. Organization plans should be in accordance to the strategies. The implementation of any IT programme should be the inspiration for future. According to various studies and reports e-governance has a positive impact on various sectors, but research is required to find out as to how this impact can be managed successfully.

2. REVIEW OF LITERATURE
E-Governance is a powerful tool in bringing the changes in government processes. E-governance can be operated through Information and Communication Technology and government processes. It can be divided into three overlapping domains: e-administration, e-services and e-society. E-governance should be firmly embedded in the existing government processes with political and technical support and must provide users with reasons to use these on-line domains. To ensure the maximize impact there is a need to change the process.

3. OBJECTIVES
1. To study the nature of e-governance
2. To understand the nature of various sectors.
3. To analyze the significant role of e-governance towards various sectors.

4. RESEARCH METHODOLOGY
This study is based on conceptual framework. Data was collected through various secondary sources and literature reviews. Intention behind this was to study how e-governance can perform in various sectors.

5. CONCEPTUAL EXPLORATION
Indian economy is primarily categorized into three sectors i.e. Agriculture, Industry and Service. India's contribution towards service sector is 55.32% of the country's GDP while the industrial and agricultural sectors contribute 28.6% and 16.1% respectively. Agriculture is the main occupation in India which contributes more towards the employment than service/ industrial sectors. The gap between two sectors has risen because there is huge amount of Infrastructure exclusion, education exclusion, financial exclusion, employment exclusion and social exclusion in India. In order to bring balanced growth among sectors and inclusive growth among citizens, the Government of India is focusing on overall development of various sectors through e-services.

Important sectors to be brought under e-governance are
- **Social Sector**

According to this there is a need to bring equal opportunities and social mobility for all sections of society by removing poverty with positive action plan for SCs, STs, OBCs, minorities and women. In the year 1960 Central Government identified SCs and STs as 405 and 225 respectively. It was amended in 1975 to 841 and 510. These changes were noticed after 15 years due to manual work system.

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- **Education Sector**

Education has been made one of the fundamental rights and accordingly legislation has been enacted to provide free education to all children. There are a plethora of programs and policies such as Sarva Shiksha Abhiyan, Mid-day Meal scheme, District Primary Education Program, Operation Blackboard, Mahila Samakhya, National Literacy Mission, to name a few. Despite so many programs and huge budget allocation, India still faces the problem of educational exclusion. The drop-out rate is more than 50 percent at elementary school level. Today around 42,000 schools still are functioning without a building of their own and several schools have only one classroom. However, the literacy rate of 74% is still lower than the worldwide average of 84% and the country suffers from a high dropout rate. There is a severe disparity in literacy rates and educational opportunities between males and females, urban and rural areas, and among different social groups.

- **Employment Sector**

Unemployment in India is characterized by chronic unemployment. Government schemes that target eradication of both poverty and unemployment attempt to solve the problem by providing financial assistance for setting up businesses, honing of skills, setting up public sector enterprises, reservations in governments, etc. There is a decline in organized employment due to inefficiency of the public sector after liberalization..

- **Financial Sector**

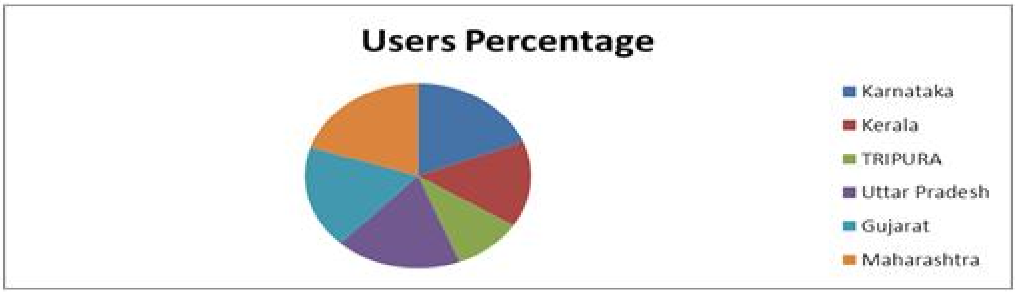
Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed to vulnerable groups such as weaker sections and low income group at an affordable cost. According to NSSO (National Sample Survey Organization, India) 45.9 million farmer households in the country out of a total of 89.3 do not have access to credit, either from institutional or non-institutional sources.

- **Infrastructure Sector**

Today most of the population of India lives below the poverty line and they are all away from various infrastructure facilities. Housing, transportation, electricity, communication, health care etc., are major infrastructures that are out of reach of Indian population. All the government programs have relied upon the strategies of Food for work program and National Rural Employment Program of the 1980s, which attempted to use the unemployed to generate productive assets and build rural infrastructure. However, quality and availability of water supply remains a major problem even in urban India, with most cities getting water for only a few hours during the day per week. India is the world's third largest road network which covers 65% of freight and 80% of passenger traffic. Container traffic is growing at 25% a year.

Table-1: State-wise Users of ICT

States	Users Percentage
Karnataka	19%
Kerala	15%
TRIPURA	10%
Uttar Pradesh	18%
Gujarat	18%
Maharashtra	20%



6. STATE WISE SIGNIFICANCE

- **Gujarat**

The One-Day Governance model provides eight citizen services. These eight services are income certificate, domicile certificate; addition/deletion/modification of name in ration card etc. based on business process re-engineering and set procedures. Several projects introduced by the government which include 24*7 days medical facilities in rural areas, model fair price shops, telemarketing of rural produce incorporating ICT, biometric attendance, citizen centers etc.

- **Karnataka**

The state has opened several Citizen Service Centers which offers an integrated range of services like certificates, pensions and social security payments. Even special packages like Bhoomi and Kaveri registration as ‘one stop shops’ which allows computerized easy access and facilities for land records. The State has developed procurement reforms linked with e-GP state wide end to end program from indent to payment with e-tendering, electronic submission of bids, contract management etc. Other successful initiatives are khajane (online treasury project), Gram Swaraj Project to improve service delivery and management of public resources at the Panchayat level etc.

- **Kerala**

The state has successfully introduced Rural ICT access “Akshaya” with e-payment facilities to remove destitution. The SWIFT pilot program provides one point solution for several types of certificates; PEARL for administration of registration laws and documents, Agriculture management Information System, etc.

- **Maharashtra**

The state has introduced special legislation, the Maharashtra Government Servants Regulation of Transfers and Prevention of Delay in Discharge of Official Duties Act, 2006 for improved public service delivery with time limit of seven days for pendency with any government servant and overall time limit of forty-five days for clearance of the file. Appropriate disciplinary action has been taken against defaulters.

- **Tripura**

E-Suvidha Kendra or service facilitation centers in all SDM offices providing several citizen services with tracking.

- **Uttar Pradesh**

The Lokavani pilot of Sitapur District incorporated franchisee e-kiosks which offer services related to grievances, land records, employment services, tender services, court information system etc. 15 services on a self-sustaining basis. The program allows for registration and tracking of applications which has been rolled out in several districts with many kiosks, pilots in land records, e-registration etc.

7. CONCLUSION

In spite of all the necessary initiatives taken, India is still suffering from exclusion in various spheres hence there is a need of an effective implementation, rather than policies or programs. It is necessary to make all Government services accessible to the common man in his locality through common service delivery outlets and ensure efficiency, transparency and reliability of such services at an affordable cost to realize his basic needs. Reforming cumbersome regulatory procedures, improving rural connectivity, establishing law and order, creating a stable platform for natural resource investment etc., will bring about equitable economic and social balance in the country. E-governance is one of the most influential weapons which controls corruption, enhances transparency, accountability and awareness. Therefore Government of India has to concentrate more on ICT that bridges the gap between Government and the governed.

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WOMEN'S RIGHTS

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ABSTRACT
Man and woman are born equal and play very important roles in the creation and development of the family. Women discrimination in their rights is not only the issue at our country level but it is a global issue and hence there is an urgent need to protect their rights in all the spheres of the life par with the man. Woman occupies a very high position in Hindu society.

A girl, a wife, a mother, a grandmother and overall woman is a key of a family. World can never be complete without a woman. In fact life without the help/ participation of woman is unfeasible. If we look into history, since ages women have been experiencing discrimination, viewed as less than fully human, considered as inferior brains, suffered a lot due to a lack of legal rights and with very little independence. Women are treated as a weaker section of the society and they are the victims of the crimes like rape, eve teasing, female infanticide, dowry, domestic violence, child marriage and acid attack. They were only allowed to live beneath the shadow of their father when not married and under the husbands when they are married. Laws are being made to protect them from the violence of their families and societies, and to provide them with their rights of which they are the owners.

Keywords: Legal status, Women rights, Domestic violence, Child marriage, Dowry, Eve teasing, social and economic problem.

INTRODUCTION

According to Hindu mythology women have a very high position in the society. But still discrimination based on gender persists in our society. When the nature/ God doesn't discriminate men from women Then Why do we? Such discrimination does not only exist in underdeveloped countries but developed countries. Women are the victims of it in one or the other way all over Global. Justice V.R. Krishna Iyer states: "The Indian woman is unjustly treated as unequal by society for the genetic sin of her discriminated sex." She suffers not only in matrimony, in inheritance but in all allied rights in economic, social, professional, public and power processes.

According to Swami Vivekananda, one of the greatest sons of India, quoted that, "There is no chance for the welfare of the world unless the condition of women is improved, It is not possible for a bird to fly on only one wing." and hence they should be given equal rights and status in the society as the man. Even though they have come closer to equality, they are still many people believe that certain careers and jobs are made just for men and not for women, even if they allowed to work they are given with lower position or post as compared with men.

Manudharmshastra says "Women are supposed to be in the custody of their father when they are children; they must be under the custody of their husband when married and under the custody of her son in old age or as widows. In no circumstances she should be allowed to assert herself independently". Over the ages these kinds of beliefs and practices were imposed on our Indian society.

Women are the victims in one or the other way all over the world. She suffers not only in matrimony, in inheritance but in all allied rights in economic, public and power processes. If she demands a right to her own personality, she is lodged with lunatics, married off or sold, divorced or even sometimes driven into streets, victimized for dowry or even forced to commit suicide or sati. Even in the lockup or jail cell or elsewhere in custody, she is in danger of sexual exploitation. Her peculiar needs are ignored and even her family disowns her. Women have always been discriminated against and have suffered and are suffering discrimination in silence. Self sacrifice and self denial are their nobility and fortitude, inequities and discrimination.

They are respectable but in practical life they are a subject of cruelty, ill treatment and all of other sorts of misbehavior of men. Still in almost all societies in India we find family attack against women. It is a harsh reality that women have been ill- treated in every society for ages in India is no exception. The atrocities are committed against her in all sections of life. She is being looked down as commodity or as a slave. Women are considered as object of sexual enjoyment and considered as a machine for reproduction of children's. They are discriminated at two levels, firstly they suffer because of their gender and secondly due to poverty.

The issue of gender justice implies protection of class of subordinate gender from the exploitation by the dominant gender. In other words, it portrays that women should participate in decision making process in all walk of life, share opportunities equally with men and also find a practical solution to issue in the family and the society at large. The gender justice is a challenge that the world is currently facing, and in spite of numerous response to the situation, gender justice is still a milestone to be achieved. Judiciary has consistently responded positively in spite of gender injustice prevailing in India.

However, it is undisputed that since ages, women have been subjected to extreme torture and embarrassment in the name of sati, dowry, female feticide, rape and sexual harassment. however if we talk about women protection and laws related, it can be said that so far almost all the prevalent laws have failed in their objective, primarily due to improper formation and subsequently due to hitches and implementation.

Government Efforts for upliftment of Women in the society:

The principle of gender justice and gender equality has been basic to Indian society over a century. Therefore, it is necessary for the national progress which is linked with the status of women and for the advancement or uplift of the women in the society which was placed at the centre for planning and policy. The principle of gender equality is also enshrined in the Indian Constitution and in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women. India has also conducted various international conventions and human rights instruments committing to secure equal rights of women. One of them is the ratification of the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993.

Violation of Women's Rights has not only confined to one state or one country but exist almost in the entire Glob and every state of the country. It is the society which is primarily liable for the violation of women's rights. Social customs, belief and cultural, peer group is secondary cause of violation of women's right. Therefore, it is necessary to site some constitutional and legal provisions for empowerment of women in India which is as follows:

IMPORTANT CONSTITUTIONAL AND LEGAL PROVISIONS FOR WOMEN IN INDIA

1. CONSTITUTIONAL PROVISIONS

The Constitution of India not only grants equality to women but also empowers the State to adopt measures of positive discrimination in favour of women for socio economic, education and political disadvantages faced by them. The Fundamental Rights, enshrined in Constitution of India ensure equality before the law and equal protection of law; prohibits discrimination against any citizen on grounds of religion, race, caste, sex or place of birth, and guarantee equality of opportunity to all citizens in matters relating to employment. Articles 14, 15, 15(3), 16, 39(a), 39(b), 39(c) and 42 of the Constitution are of specific importance in this regard.

Constitutional Privileges

(i) Article 14 of the constitution provides Equality before law for a woman.

(ii) (Article 15 (i)) The State not to discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them

(iii) Article 15(3) provides The State to make any special provision in favour of women and children.

(iv) Article 16 of the constitution of India provides the Equality of opportunity for all citizens in matters relating to employment or appointment to any office under the State.

(v) Article 39 (a) & (d) lays down that The State to direct its policy towards securing for men and women equally the right to an adequate means of livelihood (Article 39(a)); and equal pay for equal work for both men and women.

(vi) Article 39 A of the constitution of India provides and promote justice, on a basis of equal opportunity and to provide free legal aid by suitable legislation or scheme or in any other way to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities.

(vii) Article 42 of the constitution states that The State should make provision for securing just and humane conditions of work and for maternity relief.

(viii) Article 46 of the constitution of India lays down that The State to promote with special care the educational and economic interests of the weaker sections of the people and to protect them from social injustice and all forms of exploitation.

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(ix) Article 51(A) (e) provides To promote harmony and the spirit of common brotherhood amongst all the people of India and to renounce practices derogatory to the dignity of women.

(xi) Article 243 D (3) of the constitution of India provides that Not less than one-third (including the number of seats reserved for women belonging to the Scheduled Castes and the Scheduled Tribes) of the total number of seats to be filled by direct election in every Panchayat to be reserved for women and such seats to be allotted by rotation to different constituencies in a Panchayat.

(xii) Article 243 D (4) of the constitution of India provide that Not less than one- third of the total number of offices of Chairpersons in the Panchayats at each level to be reserved for women.

(ix) Article 243 T (3) lays down that Not less than one-third (including the number of seats reserved for women belonging to the Scheduled Castes and the Scheduled Tribes) of the total number of seats to be filled by direct election in every Municipality to be reserved for women and such seats to be allotted by rotation to different constituencies in a Municipality.

(x) Article 243 T (4) lays down the Reservation of offices of Chairpersons in Municipalities for the Scheduled Castes, the Scheduled Tribes and women in such manner as the legislature of a State may by law provide.

2. LEGAL PROVISIONS

To uphold the Constitutional mandate, the State has enacted various legislative measures intended to ensure equal rights, to counter social discrimination and various forms of violence and atrocities and to provide support services especially to working women, so as to ensure that the constitutional guarantee should not remain on the papers but actually executed. Due to changing in circumstances and views among the legislator, public and policy makers, which has resulted in amendments to the existing laws so as to ensure that there is no exploitation of women take place. Although women may be victims of any of the crimes such as 'Murder', 'Robbery', 'Cheating' etc, the crimes, which are directed specifically against women, are characterized as 'Crime against Women'. These are broadly classified under two categories.

(1) The Crimes Identified Under the Indian Penal Code (IPC)

(i) Rape (Sec. 376 IPC)

(ii) Kidnapping & Abduction for different purposes (Sec. 363-373)

(iii) Homicide for Dowry, Dowry Deaths or their attempts (Sec. 302/304-B IPC)

(iv) Torture, both mental and physical (Sec. 498-A IPC)

(v) Molestation (Sec. 354 IPC)

(vi) Sexual Harassment (Sec. 509 IPC)

(vii) Sexual Harassment – (Section 354A): Sexual harassment is bullying or coercion of a sexual nature, or unwelcome or inappropriate promise of rewards in exchange of sexual favours.

(viii) Assault or Use of Criminal Force to woman with intent to disrobe –(Section 354B) There was no specific provision regarding this offence. The act deal under section 354 outraging a woman's modesty was punishable with imprisonment for maximum 2 years and fine under IPC.

(ix) Voyeurism – Section 354C: Any man who watches, or captures the image of a women engaging in a private act in circumstances where she would usually have the expectation of not being observed either by the perpetrator or by any other person at the behest of the perpetrator or disseminates such image shall be punished under section 354 (C), such a person is liable.

In case of first conviction, imprisonment is not to be less than one year, but may extend to three years, and shall also be liable to fine, and on a second or subsequent conviction, punishment with imprisonment of either description for a term which shall not be less than three years, but which may extend to seven years, and shall also be liable to fine.

(x) Stalking – Section 354D: It means following a person and making or attempting to make contact for personal interaction, despite a clear disinterest being displayed by the other person. Stalking may be committed both physically and through electronic media.

(xi) Importation of girls (up to 21 years of age)

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(2) The Crimes identified under the Special Laws (SLL): Although all laws are not gender specific, the provisions of law affecting women significantly have been reviewed periodically and amendments carried out to keep pace with the emerging requirements. Some acts which have special provisions to safeguard women and their interests are:

(i) The Employees State Insurance Act, 1948

(ii) The Plantation Labour Act, 1951

(iii) The Family Courts Act, 1954

(iv) The Special Marriage Act, 1954

(v) The Hindu Marriage Act, 1955

(vi) The Hindu Succession Act, 1956 with amendment in 2005.

(vii) The Medical Termination of Pregnancy Act, 1971

(viii) Immoral Traffic (Prevention) Act, 1956

(ix) The Maternity Benefit Act, 1961 (Amended in 1995)

(x) The Dowry Prohibition Act, 1961

(xi) The Contract Labour (Regulation and Abolition) Act, 1976

(xii) The Equal Remuneration Act, 1976

(xiii) The Prohibition of Child Marriage Act, 2006

(xiv) The Criminal Law (Amendment) Act, 1983

(xv) The Factories (Amendment) Act, 1986

(xvi) Indecent Representation of Women (Prohibition) Act, 1986: This Act prohibits indecent representation of women through advertisement or in publications, writings, paintings, figures or in any other manner.

(xvii) Commission of Sati (Prevention) Act, 1987

(xviii) The Protection of Women from Domestic Violence Act, 2005

(xix) Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

(xx) To ensure women's safety at workplace: This Act seeks to protect them from sexual harassment at their place of work. Thirty-six percent of Indian companies and 25 percent among MNC's are not complaint with the Sexual Harassment Act according to a FICCI-EY November 2015 report.

(xxi) Sexual harassment at workplace also includes – the use of language with sexual overtones, invasion of private space with a male colleague hovering too close for comfort, subtle touches and innuendoes.

(xxii) Property Rights: Section 14 of the Hindu Succession Act, 1956, declares, "Any property possessed by a female Hindu, whether acquired before or after the commencement of this Act, shall be held by her as full owner thereof and not as a limited owner." This makes women absolute owners of their properties. However, not many women are aware of their rights; there is a misconception that women enjoy only limited rights over property, besides numerous other restrictions.

The Act was amended in 2005 to give equal rights to women. The amended Act, which came into effect on September 9, 2005, is applicable to the various sects and castes of Hindus, apart from Sikhs, Buddhists and Jains.

Prior to the amendment, a woman had no right to a joint ownership or coparcenary property. Section 6 of the amended Act talks about the devolution of interest in coparcenary properties. Now, a daughter becomes an owner of the coparcenary property by birthright in the same manner as a son does. Widows are also entitled to claim a share equal to that of their children at the time of distribution of the joint family property among the sons.

3. SPECIAL INITIATIVES FOR WOMEN

(i) National Commission for Women: In January 1992: The Government set-up this statutory body with a specific mandate to study and monitor all matters relating to the constitutional and legal safeguards provided for women, review the existing legislation to suggest amendments wherever necessary, etc.

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(ii) **Reservation for Women in Local Self -Government**
The 73rd Constitutional Amendment Acts passed in 1992 by Parliament ensure one-third of the total seats for women in all elected offices in local bodies whether in rural areas or urban areas.

(iii) **The National Plan of Action for the Girl Child (1991-2000)**
The plan of Action is to ensure survival, protection and development of the girl child with the ultimate objective of building up a better future for the girl child.

(iv) **National Policy for the Empowerment of Women, 2001**
The Department of Women & Child Development in the Ministry of Human Resource Development has prepared a "**National Policy for the Empowerment of Women"** in the year 2001. The goal of this policy is to bring about the advancement, development and empowerment of women.

CONCULSION

Women - a human being who was considered to be the weak part of the society but actually are the strongest one, are being discriminated by male member/society from there basic rights. Though there has been increase in the number of women using legal system to exercise their rights, there still lack of awareness among women of these rights. There have been occasions where women have exhibited that they can be empowered and motivated to claim their rights, irrespective of their educational or socio-economic status. Therefore, it is essential to equip women, especially those in vulnerable conditions, not only about their rights but also to have access or avail the legal system facility in case their rights are violated.

Parliament of India has enacted various laws for protection of women and their rights. Indian judiciary has also made important judicial pronouncements upholding the rights of women. Various laws have been made for women protection but due to illiteracy and poverty, majority of women of the country are unaware of laws. Therefore, there is the need for creating awareness so that people can exercise their basic rights.

The principal of gender equality is important in Indian constitutional in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women but also empower the state to adopt measures of positive discrimination to protect and upliftment women rights.

The above is of such importance that not only government, non-governmental but other women's organization should support in protecting the rights of Women. In order to seek gender justice, the government will have to promptly take an initiatives and actions on such issues.

SUGGESTIONS

There is a Solution concerning each and every problem. Government must make strong and more punitive policies & strategies related to prevention of the sex identification & abortions. Politicians ought to frame out insurance policies for growing conventional blessing development related to this issue. The Campaign on our Prime Minister Mr. Narender Modi **"Beti Bachao Beti Padhao"** does remain successful, so the attitude regarding Indian tribe choice remain modified closer to women.

CONCLUSION

To achieve gender equality, first of all we need to change our mind set and it will be necessary to provide for equal opportunity to women's not only in access to education, job, economic but also in the political areas for success and also to bring about structural changes in the society. Gender inequality can be eliminated by conducting mass awareness programs to the parents, families, government institutions and non- government organizations.

Being citizens of a participative democratic country, the genders, women and men, have to find solutions to the problem of gender inequality and would take us all towards our cherished dream of a truly modern society in both thought and action.

In order to seek gender justice, the government will have to promptly take an initiatives and actions on such issues such as:

1. Making the Women's to be aware about their rights through mass media such as T.V, radio, news papers, magazines and various other publications.
2. Procedure for filing of such complaint should be made in simple words and easy.
3. Strengthen the punishment should be provided in case offence of rape by providing rigors or severe punishments such as Death Punishment to accused persons.
4. By providing the grievance cell or complaints committee at the work place.

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5. Organising free education campaigns for women employees at the work place specially to make them know about their rights.
6. Providing proper security at the work place and
7. In case of sexual harassment at work place the employer has mandatory duty to put on notice board the copy of rules which prohibits sexual harassment at work place by issuing the necessary instruction as to what things amounts to harassment and such things/ circular shall be put up on the notice board of the office which is easily visible to the people to see.
8. Making the policies for Upliftment of women not only par with the state level or national level but must be par with the international level, so that maximum benefit should be made available or should be provided to women at large in the society.

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ROLE OF MULTINATIONAL COMPANIES IN THE INDIAN ECONOMY

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INTRODUCTION

Prior to 1991 Multinational companies did not play much role in the Indian economy. In the pre-reform period the Indian economy was dominated by public enterprises.To prevent concentration of economic power industrial policy 1956 did not allow the private firms to grow in size beyond a point. By definition multinational companies were quite big and operate in several countries. While multinational companies played a significant role in the promotion of growth and trade in South-East Asian countries they did not play much role in the Indian economy where import-substitution development strategy was followed. Since 1991 with the adoption of industrial policy of liberalisation and privatisation rote of private foreign capital has been recognized as important for rapid growth of the Indian economy.

Since source of bulk of foreign capital and investment are multinational corporation, they have been allowed to operate in the Indian economy subject to some regulations. Historically in India, multinationals made large investment in plantations whose products they exported. In recent years, Japanese automobile company Suzuki made a large investment in Maruti Udyog with a joint collaboration with Government of India. Maruti cars are not only being sold in the Indian domestic market but are exported in a large number to the foreign countries.

As a matter of fact until recently, when giving permission to a multinational firm for investment in India, Government granted the permission subject to the condition that the concerned multinational company would export the product so as to earn foreign exchange for India.

OBJECTIVES OF THE STUDY

1. To know the meaning of Multinational Companies.
2. To understand the Role of Multinational Companies in the Indian Economy.
3. To draw meaningful conclusion.

MEANING OF MULTINATIONAL COMPANIES

A multinational corporation has its facilities, subsidiaries, and other assets in countries other than its home country. A multinational corporation is also known as multinational enterprise. Businesses are always running after profits, therefore, they try to find out ways to decrease the cost as much as they can e.g. cheaper labor to bring about efficiency because it cuts cost of production.

The concept of MNC’s originated from Western Europe particularly England and Holland. At that time, with the help of successful trades a lot of banks and money lending agencies emerged. Later in 17th and 18th century, companies like Hudson Bay Company, British East India Company, and French Levant Company emerged as the major multinationals at that time. The modern version of Multinationals emerged after the industrial revolution. During that time, huge foreign investment flowed from Western Europe in Asia, Africa etc. Companies started searching for countries where the labor as well as the resources was cheap and still today, when the no. of MNC’s have reached around 889450, the companies are still searching for countries where they can find much more cheap labor and other resources.

Multinational Corporations (MNC) are the business organisations with headquarters in a country but also at least one operating branch, factories or plants in another country. They hold produce goods and services in many other countries, not only in the host country. They also hold much more money and generate much higher profit than small companies. There are many reasons why a multinational corporation would be established if say they want to do as well as Coca-Cola or Nokia. They would establish this in the host countries, which are often developing countries, due to the accessibility to cheaper labour and resources. Multinational corporations have a presence both in their home country and in at least one other country.

OBJECTIVES OF MULTINATIONAL CORPORATIONS ARE

To maximize the profits, having high quality customer service. Its objective also to growing at a specified rate, reaching a specific sales level, coming up with new products and acting socially responsibly. There are three generally recognized principles that underlie the multinational process. These principles are known as location, internalization and ownership.

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The following are the important reasons for the change in policy towards Multinational Companies in the post-reform period

1. Transfer of capital -The multinational corporation transfer investment, advance technology to developing countries through establishing branches and subsidiaries. Therefore, developing countries like Nepal get benefited of receiving advanced technology and capital investment through such companies.

2. Mass production -With help of advanced technology, they can produce quality goods and products at cheaper price. Due to job innovation and specialization help to produce more consumption increase as production in more units reduce cost.

3. **Increase in employment opportunity -**A multinational corporation requires a large number of skilled as well as unskilled employees to operate its activities. Thus, it provides employment opportunities to the people of host country as a result economic standard of society is improved.

4. Increase in government revenue -A multinational corporation is a large-scale business. It pays a large amount of duties, income tax, vat, etc. to government. Therefore, Government revenue is increased due to operation of such corporations.

5. Research and development -In complete world, it is need of Research and Development. To meet international standard of its products and services, a multinational corporation conducts several research and development activities. Constantly such programs are beneficial to society. It helps to develop better equipments, quality products and advanced technology in production.

6. Good international relation -A multinational corporation recognizes the country in the international market. It creates harmonious relation between parent company and subsidiary countries. It recognizes exporting country to all over the world.

RESEARCH METHDOLOGY

This paper is Descriptive and Analytical in nature. It is mainly based on secondary a source which includes books, journals, newspaper and Web Pages.

IMPORTANCE OF MULTINATIONAL CORPORATIONS

The Multinational corporations today have a revolutionary effect on the international economic system. Today they constitute a powerful force in the world economy. In the field of international trade and international finance, the multinational firms have come to exercise enormous power. In early seventies the MNCs accounted for about one-eighth of all international trade. From the nature of their growth it may be presumed that in the early eighties their share will rise to one-fourth. Among the developing countries only India had an annual income twice that of General Motors, which is the biggest multinational corporation. Otherwise the annual income of the other less developed countries is much less than that of the giant MNCs. According to an estimate by early eighties some 300 large MNCs will come to control 75 percent of the world’s manufacturing assets. The importance of multinational corporations is not limited to production, as they are also significant participants in international trade. It has been estimated that trade within MNCs, called intra- firm trade, accounts for about one - third of total world trade. If we add to this figure the trade that takes place between MNCs and other unaffiliated firms, then MNCs are involved in about two- thirds of world trade. While multinational companies played a significant role in the promotion of growth and trade in South-East Asian countries they did not play much role in the Indian economy where import-substitution development strategy was followed. Since 1991 with the adoption of industrial policy of liberalisation and privatisation rote of private foreign capital has been recognized as important for rapid growth of the Indian economy. Since source of bulk of foreign capital and investment are multinational corporation, they have been allowed to operate in the Indian economy subject to some regulations.

MNCs have contributed significantly to the development of world economy at large. They have also served as an engine of growth in many host countries.

MNCs Importance in India may be traced as follows

1. MNCs help a developing host country by increasing investment, income and employment in its economy.
2. They contribute to the rapid process of development of the country through transfer of technology, finance.
3. MNCs promote professionalisation management in the companies of the host countries.
4. MNCs help in promoting exports of the host country.
5. MNCs by producing certain required goods in the host country help in reducing its dependence on imports.

6. MNCs due to their wide network of productive activity equalise the cost of production in the global market.
7. Entry of MNCs in the host country makes its market more competitive and break the domestic monopolies.
8. MNCs accelerate the growth process in the host country through rapid industrialisation and allied activities.
9. The growth of MNCs creates a positive impact on the business environment in the host country.
10. MNCs are regarded as agents of modernisation and rapid growth.
11. MNCs are the vehicles for peace in the world. They help in developing cordial political relations among the countries of the world.
12. MNCs bring ideas and help in exchange of cultural values.
13. MNCs through their positive attitude and efforts work for the establishment of social welfare institutions and improvement of health facilities in the host countries.
14. Growth of MNCs help in improving the balance of payment status of the host country.
15. The MNCs integrate national and international markets. Their growth in these days has remarkably influenced economic, industrial, social environment and business conditions.

In short, through basically seeking maximisation of profits by using all types of resources and strategies of the global economy, eventually globalisation has become the main focus of their business. In this way, it has become a main propelling force behind the expansion of world economy at large.

RECENT STEPS TAKEN BY GOVERNMENT

Government of India has continued its pace of globalization in spite of political changes during the decade 1991-2002. Prime minister ship has changed hands in the decade Shri Narsimha Rao, Shri A.B.Vapayee, all have followed globalization prescription stage of multinational corporations.

The steps taken mainly are

- Removing obstructions in MNC entry in India.
- FERA (Foreign Exchange Rate Act, 1973) was scrapped and FEMA (Foreign Exchange Management Act) was passed to facilitate entry of MNC's.
- Import liberalization by reducing import duties (customs) in steps of 15% level.
- Establishment of joint ventures by Indian companies other countries.
- Encourages export.
- Removal of export subsidiaries.
- Removal of quantitative restriction on imports.
- Encourage foreign direct investments
- Encourage NRIs, Foreign Institutional Investors (FII) and MNCs to invest in India.
- Encouragement to Indian companies to raise capital in foreign countries by the GDR route (Global Deposit Receipt).

CONCLUSION

Today MNCs are more and more complexly integrated, they rely on more intense communication and their behavior is rather proactive than reactive one. They also face increasing competition from online enterprises that are enlarging their market share. A successful strategy is based on the added value it brings, on the way it makes a difference, on the sector's attractiveness and on the market maturity phase, so that it helps the enterprise gain a profitable and competitive position. Capital flow of MNC's may be permitted but not at the cost of national interest.

"The multinational corporation is the only organization which has the resources and scope to think, to plan, and to act with worldwide planning of markets and sources.Many international opportunities require capital and technology on scale only large multinational corporations can supply."

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NATION SKILL DEVELOPMENT SCHEME –SCHEMES FOR WOMEN AND THEIR EARNING PROSPECTS

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ABSTRACT

A skill is a type of work or activity which requires special training and knowledge. Skill sets are defined as "a single unit or combination of units which link to a license or regulatory requirement or defined industry needs" as per the Nation Quality Council - 2006

The National Skill Development Corporation India (NSDC) was setup as a one of its kind, Public Private Partnership Company with the primary mandate of catalysing the skills landscape in India. NSDC is a unique model created with a well thought through underlying philosophy based on the following pillars:

1. *Create: Proactively catalyse creation of large, quality vocational training institutions.*
2. *Fund: Reduce risk by providing patient capital. Including grants and equity.*
3. *Enable: the creation and sustainability of support systems required for skill development. This includes the Industry led Sector Skill Councils.*

Governments of several countries have special schemes to enhance the Skill Development of their population because a skilled population is the first step to development. Skill development schemes are developed by keeping in mind the present situation and the future needs and growth plans of the country. India has the second largest population in the world and it also has the largest skill deficit working population in the world. Traditionally, Indian women are not encouraged to work outside of home they are expected to take care of their home and children. Women form 48.5%1 of the total population of the country and very few of this contribute to the skilled working population. Thus leaving a large resource of the country dormant. In order to make this resource useful for the country as well as to increase the standard of living of women in the country women need to get equal or better opportunities to education and skill development. The Government of India has several skill development schemes for women which cater to both their need to stay at home and work as well to move into the outer world and earn an income. Under the National Skill Development Schemes the most popular programs among women are computer software, Health and Beauty and fashion designing.

For the purpose of the study two sets of courses i.e. Computer Software and Fashion Designing are taken into consideration to find out if the Governments efforts towards inclusion of women in the knowledge and skill work force has resulted in employability and earnings for women.

Keywords: NSD, Skill development, Women, Earnings, Employability

1. INTRODUCTION

India is the second most populace country in the world and Women are 48.5% of this total population, but they hold only 13.4% of regular salaried job and are mainly seen in the informal sector in the country. They are mainly engaged in jobs that require low or no skills and are characterized by low earning, low productivity, poor working conditions and low respect. Women, traditionally, have not been encouraged, in India, to leave homes and work out . The gender biases in India are very strong and this sometimes leads to women ending up doing jobs which are considered to be 'jobs for women only'. Women especially, in rural India and the poorer section in urban states are not encouraged to take a formal education. Therefore, large number of women do not have any employable skills they some times have skills like cooking, stitching, embroidery etc. which can used be used to earn some money , if needed.

It is the endower of a Government to ensures that all its resources are optimally utilized. Thus the onus is on the Government to ensure that the vast resource in the form of women is well utilized and contributes in the growth and development of the country. Keeping this as focus the Prime Minister Narendra Modi introduced the National Policy for Skill Development and Entrepreneurship, the aim is to create awareness and a positive pro-skilling environment in the country.

On the occasion of International Women's Day on 8th March 2018, Dr. KP Krishnan, Secretary, Ministry of Skill Development and Entrepreneurship, said, "women form a significant proportion of workforce in the country. We believe skill training will be vital in addressing some of the most pressing challenges related to inclusion, gender equality and access. Cognizant of our responsibility, we are working towards empowering

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women, enabling them to emerge as drivers of the social and economic well-being of their families. We would urge women to come forward to acquire new skills, build entrepreneurship abilities and chalk out their own destiny."2

National Skill Development Corporation (NSDC) has been executing fee-based trainings via its wide network of more than 350 training partners. The organisation has been instrumental in training more than 16 lakh women in the short/long-term courses (3 months to one year), accounting for more than 40% women amongst total trained candidates. Some of the prominent choices of skill training for women have been IT and ITES, Textiles and Clothing, Electronics and IT Hardware, Beauty and Wellness, Healthcare and Retail.

To aim of the government is to make the skill development process aspirational, accommodating and flexible to encourage women to enrol. Women have been encouraged to opt for courses of their interest.

2. LITERATURE REVIEW

There is a lot of literature on the economic implications of gender participation gaps in the IMF report of 2013, this literature stresses that gender gaps in labor force participation, entrepreneurial activity, or education act to impede economic growth

Female labor supply is often modeled using the frame work of the time allocation model (Becker, 1965), which posits that women make their labor supply decisions not only considering leisure and labor tradeoffs, but also home-based production of goods and services (including caring for children). Most studies also include wages as a key driver of female labor supply (Heckman and MaCurdy, 1980). However, as Jaumotte (2003)points out, working for a wage is chosen by women only if earnings at least make up for the lost home production (and the associated costs), implying a higher elasticity of female labor supply to wages.

A number of empirical papers have examined low and declining female labor force participation in India, with many focusing on the role of educational attainment (Mammen and Paxson, 2000).Klasen and Pieters (2012) find that for urban Indian women, participation in the workforce at lower education levels is dictated by economic necessity, and there is a pull factor coming into play for highly-educated women entering the workforce. Bhalla and Kaur (2013), find that the education level of the spouse has a larger negative effect (each extra year of male education means a drop in female participation of 1 percentage point) than the positive effect on participation of increasing female education. They also find some evidence of a depressing effect of the emerging middle class on female labor force participation.

Focus was also given on the role of female entrepreneurial activity in India. Ghani, Kerr and O'Connell (2012) use detailed micro-data on the unorganized enterprises and analyze the spatial determinants of female entrepreneurship in India in the manufacturing and services sectors. That paper finds that adequate infrastructure and education levels predict higher female entry. Higher levels of femaleentrepreneurial activity in turn have been associated with stronger economic growth. Indeed,Esteve-Volart (2004) uses panel data on Indian states to show that the ratio of female to maleworkers (and managers) is positively correlated with both growth and living standards.

Mishra Saraswati in her book "Status of Indian Women" stated the problemsof women employees. The book covers level of status of women employees. However, the contribution made by Mishra on the issues related to the women employees gives detail information about the status of women employees in our society. The book covers intelligent conclusions on the same

Chauhan Poonam in her book "Status of Women in India" explained the fundamental rights of women employees with practical application and implication.The book covers several articles on provision for women and children. It has stated that development of any economy is badly affected due to gender differentiation. The book elaborates the treatment of both the sex and its negative impact on performance of women employees at work place

3. OBJECTIVE OF STUDY

1. To find out the outcome, in terms of employment and earning of women who have undergone different training under the National Skill Development Council of India
2. To find if base qualification in women have benefited more from the Skill Development women as compared to their counterparts will lesses base education.

4. DATA ANALYSIS

The researcher contacted the respondents over phone personally, in order to be able to explain the question, if required, with a well–prepared sequentially arranged questionnaire. The questionnaire was divided into three parts. Part one was respondent's profile and Part two was to understand the skill training they took and their satisfaction with the course they opted for. The third part was to find out if the courses resulted in them being able to gain fruitful employment or earn an income through the skills acquired .

4.1 This research paper tests this null hypotheses

1) There was no evidence of improvement in earnings of women who took the NSDC skill development programs
2) The women with higher education did not see any significant different in the employability or income as compared to their counterparts with lower base education.

4.2 Primary Data

Primary data was collected randomly through a structured questionnaire in Mumbai, Navi Mumbai and Thane city. A prominent and leading partner with the Government of India in the NSDC was selected for the purpose of the study. Data of past students from their five prominent centers who had done their course between 2016-2017 was taken to find out their employability and earnings after they had finished their training. The data was collected with the help of a structured questionnaire that was administered over phone or through whatsapp.

4.3 Sample Size

The study was limited to those participants who willingly elected to be part of the study. A total of 250 questionnaires were used for the study from several more that were administered.

4.4 Sample Design

The researcher relied on convenience based random sampling technique, considering the research methodology and research type as per guidelines. A caution was exercised during the study that the respondents who did not show an inclination to be a part of the study were not insisted for.

4.5 Sample Selection

The following pointers were considered when selecting the sample

1. All sample to be Women
2. Age of the sample to be between 18-40
3. All women in the sample should have undergone some training under NSDC for a period between 3 months to 1 year and completed the course successfully and earned the certificate.
4. All women were unemployed before they took the Skill Development course
5. Questionnaire was administered only to those women who were willing to be part of the study.

4.7 Secondary Data

The secondary information or data was collected from published sources such as journals, magazines, newspapers, Industry reports, internet, talking to the faculty at the centers and other sources.

4.8 Statistical Analysis

Efficient and effective data analysis is the result of effective data preparation. This was found to be very crucial between the completion of the field work and the statistical processing of the collected data. Data preparation involved transferring the questionnaire into an electronic format which allowed and facilitated subsequent data processing. Data sheet was prepared directly at Statistical Program for Social Sciences (SPSS) software for further analysis. Each response was assigned code for data entry and data record. Transcribed data sheet was prepared for data analysis. On the basis of data sheet, tables and graphs were prepared for the analysis.

Table-1: Sample Demographics

Center	Frequency	Percentage
Dadar	50	19.9
Kurla	50	19.9
Thane	50	19.9
Nerul	50	19.9
Panvel	50	19.9
Age	**Frequency**	**Percent**
18-20	109	43.4
21-25	79	31.5

26-30	33	13.1
31-35	20	8.0
36-40	9	3.6
Family_size	**Frequency**	**Percent**
Single	13	5.2
2	60	23.9
3-4	74	29.5
5-6	71	28.3
>6	32	12.7
Qualification	**Frequency**	**Percent**
school drop out	12	4.8
10th Grade	40	15.9
12th Grade	59	23.5
1st year graduation	42	16.7
2nd year graduation	31	12.4
Graduate	41	16.3
Post Graduate	25	10.0
Status Maratial	**Frequency**	**Percent**
Yes	117	46.6
No	92	36.7
Widowed	13	5.2
Divorced	28	11.2
Total Family Income	**Frequency**	**Percent**
5000-10000	10	4.0
10001-20,000	25	10.0
20001-30000	111	44.2
30001-40000	59	23.5
25001-30000	37	14.7
<50000	8	3.2

Source: Primary data

5. HYPOTHESIS TESTING

H01 - There was no evidence of improvement in earnings of women who took the NSDC skill development programs

Table-5.1: Employment among Women after the Skill course

Employment or Earning capacity	Frequency	Percent
Yes	202	80.5
No	48	19.1
Source: Primary data		

All the women who formed the part of this study were unemployed before they took the Skill Development course and after having taken the course 80.5% of the total sample is fruitfully employed and earning an income. Thus the Null hypothesis is rejected.

H0 2 - The women with higher education did not see any significant different in the employability or income as compared to their counterparts with lower base education

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Table-5.2: Educational Qualification Vs Personal Income Crosstabulation

Educational Qualification	Personal_income				Total
	Net Income	5000-10000	10001-20,000	20001-30000	
school drop out	7	5	0	0	12
10th Grade	8	24	7	1	40
12th Grade	4	33	19	3	59
1st year graduation	1	29	11	1	42
2nd year graduation	2	16	12	1	31
Graduate	13	3	22	3	41
Post Graduate	13	2	6	4	25

Source: Primary data

Table-5.3: Correlations between Personal Income and Educational Qualification

		Personal Income	Educational Qualification
Personal income	Pearson Correlation	1	.114
	Sig. (2-tailed)		.071
Educational Qualification	Pearson Correlation	.114	1
	Sig. (2-tailed)	.071	

Source: Primary data

Table-5.4: Correlations between Educational Qualification and Employability/Earnings

		Educational Qualification	Employability/ Earnings
Educational_Qualification	Pearson Correlation	1	.168**
	Sig. (2-tailed)		.008
Employability	Pearson Correlation	.168**	1
	Sig. (2-tailed)	.008	

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data

The data analysis clearly indicate that there is very weak positive correlation between educational qualification and employability and income of the sample. Thus the Null Hypothesis is rejected.

6. CONCLUSIONS

The above study has thrown up a few points that need to be considered

Employability: All the women who were part of the sample were told by the Skill centre that after completion of the course they would be given employment. Placement assistance was provided to all candidates but some candidates did not accept the employment provided since they found it the payment to be very less. Most of the women who were not employed were from the highly educated category. Some more who found themselves unemployed were those who did Certificate courses and were not very regular for the courses and did not learn enough or did not follow up with an advanced course to be component enough to use the skill learned to earn money. This was more with women who did the certificate course in tailoring.

Table-6.1: Educational Qualification Vs Employment/ Earning

		Are you employed or earning an income		Total
		Yes	No	
Educational Qualification	School drop out	6	6	12
	10th Grade	32	8	40
	12th Grade	55	4	59
	1st year graduation	41	1	42
	2nd year graduation	29	2	31
	Graduate	27	14	41
	Post Graduate	12	13	25
Source: Primary data				

Relevance: Many of the women felt that the course content could be better especially the educated women. Some even felt that the course content was not relevant to the industry need. Most of the women who were unemployed felt that the course content was not relevant and thus their opinion could not be taken as practical but many of the women who were employed felt that the course content needs to be improved.

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Table-6.2: Course Vs Relevance to Industry

Skill_Course	Feedback on course				
	Good	Bad	Could Be better	not relevant to industry need	Should have more practical
DCAW-12months-IT	13	7	7	5	2
DCAG-12months-IT	16	4	4	6	0
CWD-6months-IT	2	1	5	0	0
CCO-6months-IT	28	3	13	8	1
DF-12months-fashion	16	0	7	0	1
CF-6months-fashion	28	0	1	0	1
CTD-6months-tailoring	16	4	4	4	3
CT-3months-tailoring	0	1	0	0	0
CO4-3months-beauty	33	1	5	0	0
Total	152	21	46	23	8

Source: Primary data

Table-6.3: Course Vs Employability/Earning

Skill_Course	Employability/Earning		Total
	Yes	No	
DCAW-12months-IT	22	12	34
DCAG-12months-IT	18	12	30
CWD-6months-IT	8	0	8
CCO-6months-IT	45	8	53
DF-12months-fashion	24	0	24
CF-6months-fashion	28	2	30
CTD-6months-tailoring	19	12	31
CT-3months-tailoring	0	1	1
CO4-3months-beauty	38	1	39
Total	202	48	250

Source: Primary data

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PROBING ON DISSEMINATION OF HEALTH INSURANCE IN INDIA

Dr. Lalita Mutreja

ABSTRACT

Health and socio-economic developments are so closely intertwined that it is impossible to achieve one without the other. Health is a priority goal in its own right, as well as central input into economic development and poverty reduction. Improving the health of individuals, particularly those belonging to socially and economically disadvantaged groups, is a key objective of the Indian government and a major consequence of a Constitution that repeatedly directs the state to this end. However Health disparities have always been a concern for an Indian economy. Every year the expenditure on health care facilities displays an upward trend. Millions of rupees are spent on provision of health care facilities in government hospitals but despite this fact the perception of more than three fourth of the population remains secondary. People in the country don't look upon health insurance as a precautionary tool but always as curative measure. Despite of the fact that country has witnessed a considerable growth in the health insurance business in the last decade, majority of its populace remains out of reach. Low levels income being one of primary reasons for not embracing health insurance and secondly lack of willingness to buy health insurance continues to restrict its usage. The interstate analysis vividly demonstrates the huge disparity in coverage of health insurance amongst the masses with huge gap between the top five and lowest five states under health insurance coverage. The study however percolates at grassroots level in Konkan district of Maharashtra to investigate the number of persons covered under health insurance.

INTRODUCTION

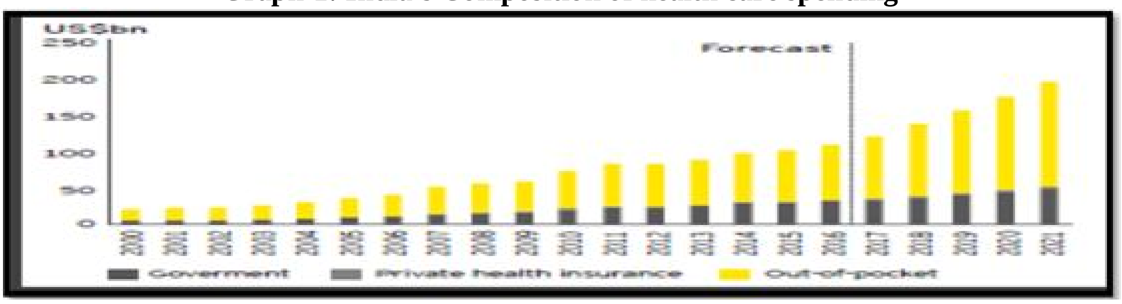
"Health is not valued till sickness comes" – Thomas Filler.

Health and socio-economic developments are so closely intertwined that it is impossible to achieve one without the other. Health is a priority goal in its own right, as well as central input into economic development and poverty reduction. Improving the health of individuals, particularly those belonging to socially and economically disadvantaged groups, is a key objective of the Indian government and a major consequence of a Constitution that repeatedly directs the state to this end. However Health disparities have always been a concern for an Indian economy. Every year the expenditure on health care facilities displays an upward trend. Millions of rupees are spent on provision of health care facilities in government hospitals but despite this fact the perception of more than three fourth of the population remains secondary. In India even today only 20% of people are under health insurance coverage with majority of them being government employees. In India where PCI is Rs 1,11,782 and more than 21.9 % population below poverty line the out of pocket expenses on health have a catastrophic impact on household. The need of people to embrace quality and affordable health care services was realized in 1694 by Hugh Elder Chamberlin who introduced the concept of health insurance. But health insurance coverage remains undermined even today. The health structure remains dismissal with high mortality rate and high incidence of infectious diseases. The scenario remains worse in the rural areas where even the government health care mechanism is substandard. Over the period of time government has taken enormous initiatives to widen the scope and coverage of health insurance amongst the masses but fallouts have been high and challenging.

Health Insurance Status in India – Facts and Figures

India has one of the world's highest rate in out of pocket expenses coupled with poor government spending which is evidently apparent in Rural India. Regulation of clinics and standard heath care ecosystems are weak and poorly maintained. India's Composition of health care spending can be summarized as below –

Graph-1: India's Composition of health care spending



Source: Oxford Economics

The graph vividly demonstrates that out of pocket expenses on health care continue to soar higher presently and even in coming years. The private sector though displays a promising growth its contribution on whole remains meagre.

The research study therefore pinning down at state level and grass root level finds out the number of persons actually covered by health insurance in the country. At state level it uses secondary data while at grass root level finds out the actual holding of health insurance policies in the rural areas of Konkan District of Maharashtra.

LITERATURE REVIEW

Akila(2013) in his study, "Penetration of Health Insurance Sector in Indian Market" elaborated that India has turned out to be a basket full of opportunities for world players with its young demographics. However, the grave problem here lies is underutilization of potentiates with special reference to health insurance. It stills fails to pin down amongst the masses. Though persistent efforts have been taken by the Indian players the impact remains unsatisfactory. The author reviewing the challenges in this arena recommended that mass marketing strategies like promotion of Group Insurance, Micro insurance for BPL families shall prove beneficial for enhancing the growth of this industry. The other stake holders like health care providers and TPAs also should work together to enhance the penetration of Health Insurance sector in India. In their research work "Helping Consumers Understand and Use Health Insurance in 2014"- Kavita K Patel et al presented that the primary challenge in this sector relates to application and usage of health insurance as tool for social security measure. The need to develop perspective amongst the masses with respect to usage of health insurance is the need of an hour. The study recognizes that not only awareness is vital but conversion of awareness into usage holds value to the economy and individual. The research study here proposes a synoptic model to help penetrate health insurance amongst the populace. Thus, literature spells the demand side barriers such as low level of awareness, limited income and reluctance to embrace health insurance leads to unsatisfactory performance of Indian health insurance sector. Analysing the supply side factors- "Quality of Care in India" by Manoj Manmohan, Katherine Hay and Nachiket Mor discussed that the quality of health care services in India are substandard and at a higher end wiping out major chunk of savings amongst lower middle class. Efforts are required by both public and private sector to improve quality. For improving the quality of health care system require special attention on governance issue, institution and capacity etc. In Frost and Suvillian study titled "Indian Wound Care Market: A Review (2004) points out inadequacy of healthcare mechanism in India. Despite of huge population to be catered, the number of hospitals cling to 16000 with 9,00,000 beds screeching out dearth of availability of health care systems. Furthermore only 60% belong to public sector which are not maintained as per International standards. Health surveillance, track keeping, record keeping are not maintained. Thus, confidence in healthcare ecosystem fails. Despite of the strenuous efforts undertaken by government it fails to mobilize and channelize its population towards health insurance.

To infer the literature review clearly spells out the dearth of quantitative data pertaining to penetration and level of awareness amongst the masses. It also calls out for increased government intervention.

RESEARCH OBJECTIVES

1. To evaluate the state wise penetration of health insurance coverage in India during the period 2014-16.
2. To find out the extent of health insurance holdings amongst the respondents under study.
3. To draw conclusions and propose recommendations from the research study.

RESEARCH HYPOTHESIS

H_1 – There is significant difference in the number of persons covered under health insurance amongst the various states and union territories of India.

H_2 – The health insurance penetration amongst the respondents under study is significantly low.

RESEARCH METHODOLOGY

The study extracts secondary data from IRDA Handbook of Statistics 2015-16 and Census Data 2011. Since the IRDA data pertains to 2014-15 and 2015- 16 and Census data 2011, to remove the disparity between the two data sets, the population data maintaining the same composition rate an proportional overall annual growth rate of 1.1% was applied to find out the percentage of populace covered under health insurance.

With respect to primary data following points are to be noted

Sample Size – 500

Sampling Area – Raigad, Ratnagiri, Sindhudurg and Slums of Mumbai

Sampling Technique –Random Sampling Method

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Penetration refers to number of persons actually holding a health insurance policy.

RESEARCH FINDINGS

H_1 – There is significant difference in the number of persons covered under health insurance amongst the various states and union territories of India.

Table-1: Health Coverage amongst Populace in 2014-15 and 2015-16

	Population 2014-15	Persons covered under HI	% of Persons Covered	Population 2015-116	Persons covered under HI	% of Persons Covered
Andhra Pradesh	87490362.53	1615000	1.8459176	88452756.49	1419000	1.604246217
Arunachal Pradesh	1428740.891	1207000	84.47997868	1444457.04	711000	49.22264769
Assam	32209213.91	658000	2.042893695	32563515.25	222000	0.681744579
Bihar	107268009.3	2143000	1.997799731	108447957.3	22180000	20.45220633
Chattishgarh	26392327.55	21771000	82.48988255	26682643.15	6035000	22.61769933
Goa	1506358.953	241000	15.99884275	1522928.901	285000	18.71393995
Gujarat	62398287.35	9971000	15.97960525	63084668.49	8922000	14.1428975
Haryana	26198969.58	3033000	11.57679118	26487158.24	3541000	13.36874257
Himachal Pradesh	7085271.835	1145000	16.16028328	7163209.824	1610000	22.47595756
Jammu & Kashmir	12967612.52	46000	0.354729908	13110256.25	244000	1.861138297
Jharkhand	34066134.47	5905000	17.33393028	34440861.94	5738000	16.6604425
Karnataka	63170289.04	23898000	37.83107591	63865162.2	29087000	45.54439228
Kerala	34501634.5	12341000	35.76931985	34881152.47	14888000	42.68207597
Madhya Pradesh	75019734.18	1424000	1.898167216	75844951.24	1239000	1.633595882
Maharashtra	116122221	85728000	73.82566338	117399565.4	95810000	81.61018284
Manipur	2812565.568	276000	9.81310456	2843503.788	306000	10.76137128
Meghalaya	3062899.11	9000	0.293839257	3096591	2067000	66.75082373
Mizoram	1127414.952	187000	16.58661699	1139816.516	38000	3.333869922
Nagaland	2046683.461	4000	0.195438136	2069196.978	13000	0.628263048
Orissa	43346903.53	25071000	57.83804137	43823719.46	20176000	46.03899497
Punjab	28628569.3	973000	3.398702848	28943483.55	7015000	24.23688906
Rajasthan	70910506.15	3697000	5.213613893	71690521.7	35671000	49.75692623
Sikkim	627963.1035	3000	0.477735074	634870.6975	12000	1.890148663
Tamil Nadu	74545826.07	49513000	66.41954703	75365830.13	54347000	72.11092866
Telagana	36368201.53	1768000	4.861389691	36768251.74	2567000	6.981566647
Tripura	3793513.526	1817000	47.897549	3835242.174	2136000	55.69400583
Uttar Pradesh	206240379.4	7617000	3.693263182	208509023.6	9076000	4.352809219
Uttarakhand	10454290.66	238000	2.276577223	10569287.86	5800000	54.87597726
West Bengal	94395492.09	17320000	18.34833382	95433842.48	19105000	20.01910381
Andaman&Nicobar	392620.5773	1000	0.254698826	396939.4036	6000	1.511565732
Chandigarh	1089874.893	1370000	79.5513	1101863.516	1576000	69.915
Dadra & Nagar Haveli	354292.0609	115000	32.45909595	358189.2735	40000	11.16728025
Daman & Diu	251015.563	51000	20.31746534	253776.7341	113000	44.52732848
Delhi	17312195.48	6930000	40.02958498	17502629.62	6775000	38.70846922
Lakshwadeep	66578.63048	0	0	67310.9954	0	0
Puducherry	1285984.709	38000	2.954934047	1300130.54	191000	14.6908325
Mean			**23.85**			**28..45**

The All India average of percentage of population covered under health insurance was 23.85% in 2014-15 which increased to 28.45% in 2015-16. The data vividly spells out that majority of populace covered under health insurance is significantly low with huge interstate disparity which leads to spillover effect on the overall average rate. States like Arunachal Pradesh, Chhattisgarh and Maharashtra lie way above the average level while union territories like Lakshadweep & Andaman & Nicobar Island and states like Bihar, Andhra Pradesh and Assam lie way below in the pyramid. To further investigate statistically the study uses one sample t test using SPSS software independently for each year –

2014-15

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
%covered	37	23.85045713	30.07648090	4.944543001

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
%covered	4.824	36	.000	23.85045713	13.82245913	33.87845512

2015-16

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
% Covered	37	28.45376980	29.86820187	4.910302140

One-Sample Test

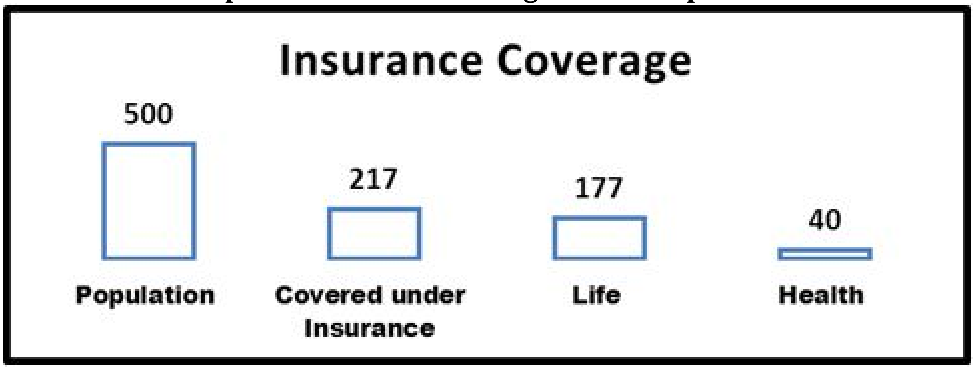
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
% Covered	5.795	36	.000	28.45376980	18.49521549	38.41232411

The p value obtained is 0.00 which leads to non-acceptance of null hypothesis i.e There is significant difference in the number of persons covered under health insurance amongst the various states and union territories of India calling out for wider coverage of health insurance.

PRIMARY STUDY

H_2 – The health insurance penetration amongst the respondents under study is significantly low.

Graph-1: Insurance Coverage under Respondents



Test Statistics

	2.7.2
Chi-Square	218.013[a]
df	2
Asymp. Sig.	.000

The test statistics being 0.00 leads to non-acceptance of null hypothesis i.e The health insurance penetration amongst the respondents under study is significantly low. Out of total population surveyed only 8% of population is covered under health insurance. Due to strenuous efforts of various stakeholders life insurance displays a significant number while health insurance is negligible. Moreover the demographic profile of people insured under health insurance are in late 30's and those salaried by occupation. This points out that age and occupation are two major demographic features influencing its penetration. Thus health insurance doesn't act as preventive cushion but as tax benefit amongst the respondents. On other hand the paradox is poor and needy are the one's whose major income is wiped out under health care expenses and they lack supportive system. They fail to embrace health insurance as cushion calling out for improved government intervention and availability of health insurance at affordable rates.

LIMITATIONS OF THE STUDY

1. The data pertaining to 2016-17 and 2017-18 is still not available and therefore previous year data was utilized.
2. The primary data is confined to limited geographical area due to time and money constraint.

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SCOPE FOR FURTHER STUDY

1. Historical Time Series Analysis could be used to analyze the trends and ensure appropriate action.
2. Factors influencing health care mechanism could be studied in detailed.

CONCLUSION

The facts and figures clearly demonstrate that health insurance industry in India is poorly developed with huge potentialities at its disposal. Despite the concept of health insurance being introduced in the year 1694 it remains at nascent stage. People still perceive it to be as medium of tax saving and not preventive measure. A lot more has been left in the area of government healthcare mechanism which is largely plagued by substandard equipment and poor availability of beds and doctors. The research quantifies the extent of penetration of health insurance amongst the masses at grassroots level screeching out for customization of plans and policies rather than an umbrella one. It further persuades not only to inculcate awareness amongst the masses but also improve the conversion rate and actual usage of health insurance. Innovations and expanding coverage shall act as game changer for the economy.

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SKILL DEVELOPMENT, A WAY TOWARDS EMPLOYABILITY AND SUSTAINABLE DEVELOPMENT

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ABSTRACT
Knowledge, skills, globalization and competitiveness have intensified the need for highly skilled workforce in the developing as well as developed countries as it helps them to accelerate their socio-economic development. According to the International Labour Organization, skill development is very important in stimulating a sustainable development process. The Indian labour and prospective employees need to acquire skill and knowledge to gain employability. With the demographic dividend, India needs to impact adequate skills to its workforce. The objective of skill development is to develop a workforce empowered with the necessary and upgraded skills, knowledge and internationally recognized qualifications to gain access to the decent employment and ensure Indian competitiveness in the dynamic global market.

Keywords: skill development, demographic dividend, sustainable development, employability.

INTRODUCTION
Knowledge and skills are the key engines of micro-economic growth and socio-economic development and stability of any country. Appropriate policies for skill development occupy a dominant place in the development of economy. Countries with higher and better quality knowledge and skills more effectively respond to the challenges and opportunities of globalization. Globalization, knowledge and competition have intensified the need for highly skilled workforce in the developing as well as developed countries as it enables them to accelerate their growth rate towards higher trajectory. Skill development is the need of the hour to generate employment opportunities. So the Indian labour prospective employees need to acquire skill and knowledge to gain employability. It is important to focus on the development of Indian labour force to become eligible enough to fit into the industry requirement. Today all economies need skilled workforce to meet global standards of quality to increase their foreign trade to bring advanced technologies to their domestic industries and to boost their industrial and economic development. In this way, skills and knowledge become a major driving force of socio-economic growth and development of any country.

The skill development capacity has been assessed in the form of general education and vocational training level of the Indian workforce in the age group of 15 to 59 year and which was found to very low i.e. around 38% of the workforce are even illiterate, 25% are having below primary or up-to primary level of education and remaining 38% has an education level of middle and higher level whereas on 10% of the workforce is vocationally trained with 8% informal training and 2% formal training. India is uniquely positioned in the world because of demographic dividend as compared to developed countries whose population is ageing. Japan, China, Western Europe, America and many other countries in the world are grappling with an ageing population. On the contrary, India with an average age of 29 years and with a median age is much below China and other developed countries. India's 65% of population is below 35 years of age and 70% of the population will be of working age by 2025. This high population employed, trained skillfully with vocational training can capitalize the advantage of demographic dividend and lead to sustainable development but this demographic dividend can turn into demographics liability if the same high unemployed population is kept away from skill development. With the demographic dividend, India needs to impart adequate skills to its workforce in order to boost employability and thereby sustainable development.

Now the Government of India has introduced Make in India programme which will have to bring an economic revolution by making India global manufacturing hub and welcoming both domestic and international industrialists to invest in India which will generate employment and overall development of India. It will boost sustainable development of India. India focuses on economic, infrastructure and technical development with the help of skill development programme.

OBJECTIVES OF THE STUDY
1) To study how employability and sustainable development can be boosted through skill development.
2) To understand the present status of skill development in India.
3) To understand the challenges in skill development in India.
4) To analyze if the skill development measures will help bridge the gap of existing skills and required skills of workforce and labour force in India.

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DATA OF WORLD BANK

Data of World Bank suggested that in 2013, the contribution of manufacturing sector to Indian Economy was just 13%. The overall contribution to GDP by manufacturing sector was just 28%. India's contribution to world's Manufacturing is also very low with a contribution of just 1.8%. These statistics clearly indicates that India's stand in manufacturing is very poor (Goyal, Kaur & Singh, 2015).

If India will be transformed in a Manufacturing destination attracting investment from global and domestic Industrialist, it will generate many employment opportunities for the Indian labour force (Goyal, Kaur, & Singh 2015).

INDIAN GOVERNMENT'S NEW POLICIES

In the last decade India has a impress economics growth rate but still it is not able to generate employment opportunities to meet the growing employable population. Make in India focues on creating 100 million new employment opportunities in manufacturing industry lowering down in growing problems of unemployment in India. In India only about 14 percent of the labour force is employed in formal jobs (Green, December 15, 2014). Other than initiatives like Smart City development, Skill India, Digital India, Start up India, FDI enhancement, National Investment & Manufacturing zone, creation of Industrial Corridor will not only make India a global manufacturing hub but it will also generate a huge number of employment opportunities with growing Industrial demand. (Sharma, Kaul, Goel, & Narang. 2015).

TAKING HELP OF EXPERIENCED EMPLOYEES

Along with universalization of Primary Education in India, skill development for manufacturing sector is also important. To make this process effective, retired employees from Armed Forces and Railways can be used as these two organizations have thousands of skilled and experienced personnel for the introduction, maintenance and up gradation of all kinds of mechanical and electrical equipments. Such experiences and skilled personnel can effectively contribute in strengthening Technical and Industrial Training institutes like ITIs.

CREATING AWARENESS OF SKILL DEVELOPMENT

In 2010, the first of its kind Manufacturing Policy was launched with prime focus on skill development as a strategy to enhance skill requirement India's manufacturing sector. In fact, in focused on skill enhancement of less educated unskilled labour in the unorganized sector and proposed a Modular Employable Skills (MES) scheme under DGE&T. The relevant industry designs the educational courses to include the necessary skills requirement (Okada, 2012). Moreover, in private sector, Industrial Associations like CII (Chamber of Indian Industries), FCCI (Federation of Indian Chamber of Commerce and Industries) have played a pivotal role in creating awareness on Skill Development by organizing seminars, workshop and liasioning with Government agencies in bringing institutional reforms. Moreover Industry also realized the urgent requirement of skill development provision to solve their problem of lack of skill required by the Industry (Okada, 2012).

SKILL DEVELOPMENT INITIATIVES BY GOVERNMENT OF INDIA

In recent years, India has seen rapid economic growth with the growth of advanced industries and talented skilled Human Resource. With the growing economic growth, it is required to emphasize on acquiring the enhancing the knowledge and skill of the youth of the Nation. But India has a huge skill gap in comparison to rest of the world. In India, only 10% of the total Labour Force get some skill training (2% with formal training and 8% with informal training). Moreover, 80% of the new addition into the workforce does not even have the opportunities for training for skill enhancement (FICCI, Ernst & Young, September 2012). With the new entrant of 12.8 million young labour force in the market every year, the government recognizes that India faces a serious skills shortage, as the majority of these new entrants are likely are unskilled (Okada, 2012).

So knowledge and skills are the need of the hour in order to have micro-economic and socio-economic growth of the country. When a country follows the path of skill development, it takes a way towards employability and sustainable development in its life. Skill development will create new job opportunities on a large scale and even improve the quality of existing employments in order to achieve desired results in the economy of the country. So the government must focus on introduction of skill development programmes. Even the private sector has to provide quality on job training to its employees for better results. The following table indicates how the Government of India has launched Strategic Institutions in National Skill Development.

Table-2: Strategic Institutions in National Skills Development

Lead Initiative/Functionary	Launched By	Launch Date
Prime Minister's National Council on Skill-Development (PMNCSD)	Prime Minister's Office	1st July 2008
National Skill Development Coordination Board (NSDCB)	Planning Commission	24th July 2008

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National Skill Development Corporation (NSDC)	Ministry of Finance	31st July 2008
National Skill Development Fund (NSDF) (Trust)	Ministry of Finance	20th October 2009
Office of the Adviser to the PM on Skill Development	Prime Minister's Office	31st January 2011
National Skill Development Agency (NSDA)	Ministry of Finance	9th May 2013

RECOMMENDATIONS

The following steps can be taken to make skill training fully inclusive to achieve training target

- Unconventional formal skill training should be imparted to create more job opportunities.
- The government should set up more standardized skill-based institutions or skill development centers across the country.
- The instructional material or syllabus must include more practical learning than theoretical.
- The policy makers should focus on women specific policies for their effective participation in the employment market.
- The labour force of the unorganized sector should be focused on.
- The institutions located in semi-urban and rural areas should be given rapid expansion and up-gradation in order to provide efficient training capabilities to prospective aspirants.
- The government can provide innovative packages of financing vocational training along with formal education to attract underprivileged.
- A Career and Counseling Window may be developed at a district level with a pool of professional from the field of psychology and skill planning to support the initiative.
- Creating a work force of certified trainers to take skill development to new heights and train youth with same direction and motive, to generate a sense of entrepreneurship and earning on own.
- The government can provide innovative packages of financing vocational training along with formal education to attract underprivileged youth.
- These certified trainers should be motivated to reach to the most remote areas of country and impart skills. There should be provision of rewards by Government when they manage to meet target.
- Unconventional formal skill training should be imparted to extract opportunities from least explored sectors. More focus should be given on rural, uneducated and unemployed youth managing livelihood in remote areas. Skills development courses should be framed keeping in view their necessities also, without getting shadowed by private/enterprise needs. For instance, specialized training to convert bio waste into meaningful products to earn livelihood at the same time protecting environment

CONCLUSION

To make India project successful, youth of the nation should be empowered with formal education, technical and vocational training to meet the industrial and market requirement as per global standard. To make India internationally competitive and to boost employability and sustainable development, a skilled workforce is essential. As more and more India moves towards the knowledge economy, it becomes increasingly important for it to focus on advancement of the skills and these skills have to be relevant to the emerging economic environment.

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INDIAN JUDICIARY AND DIMENSIONS OF SOCIAL WELFARE

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ABSTRACT

Social welfare is an integral part of social justice in the generic sense. Justice is the genus, of which social justice is one of its species. Social justice is a dynamic devise to mitigate the sufferings of the poor, weak, dalits, tribals and deprived sections of the society and to elevate them to the level of equality to live a life with dignity of person. In other words, the aim of social welfare is to attain substantial degree of social, economic and political equality, which is the legitimate expectation of every section of the society. In a developing society like ours which is full of unbridgeable and ever widening gaps of inequality in status and of opportunity, law is a catalyst to reach the ladder of justice. A duty has been cast on the State, which includes the judiciary, to secure a social order for the promotion of the welfare of the people. Our judiciary has not only defined but also expanded the concept of welfare of people and obligation of welfare state. Hence judges are also designated as Social Engineers.

Keywords: Role of Judges, Social Welfare and welfare State and Judiciary is committed towards National Social Challenges.

INTRODUCTION

Social welfare is an integral part of social justice in the generic sense. Justice is the genus, of which social justice is one of its species. Social justice is a dynamic devise to mitigate the sufferings of the poor, weak, dalits, tribals and deprived sections of the society and to elevate them to the level of equality to live a life with dignity of person. In other words, the aim of social welfare is to attain substantial degree of social, economic and political equality, which is the legitimate expectation of every section of the society. In a developing society like ours which is full of unbridgeable and ever widening gaps of inequality in status and of opportunity, law is a catalyst to reach the ladder of justice[1]. A duty has been cast on the State, which includes the judiciary, to secure a social order for the promotion of the welfare of the people[2].

The Constitution is not for the exclusive benefit of Governments and States. It is not only for lawyers and politicians and officials and those highly placed. It ultimately exists for the common man, for the poor and the humble, for those who have businesses at stake and also for the butcher, the baker and the candlestick maker. It lays down 'rule of law' and free democratic system. It constitutes India into a Sovereign, Democratic, Republic and guarantees in every provision rights and freedom to the individual side by side and consistent with the overriding power of the State to act for the common good of all[3]. The Preamble and various Articles contained in Part IV of the Constitution promote social justice so that life of every individual becomes meaningful and he is able to live with human dignity. The concept of social justice engrafted in the Constitution consists of diverse principles essentially for the orderly growth and development of personality of every citizen.

The values and beliefs of welfare State and social justice are adequately reflected in large number of judicial judgments. Various High Courts, National and State Industrial Tribunals involving interpretation of the provisions of the Industrial Disputes Act 1947, Indian Factories Act 1948, Payment of Wages Act 1936, Minimum Wages Act 1948, Payment of Bonus Act 1965, Workmen's Compensation Act 1952, the Employees Insurance Act 1948, the Employees Provident Fund and Miscellaneous Provisions Act 1952 and the Shops and Commercial Establishments Act 1961 enacted by different States[4]. Judges of the High Courts and of apex court have a vital role to ensure that the promise is fulfilled. If the judges fail to discharge their duty in making an effort to ensure the Preambular promise a reality, they fail to uphold and abide by the Constitution

[1] Justice R.C. Lahoti, Preamble- The Spirit and backbone of the Constitution of India, Anundoram Barooah law Lectures, Seventh Series, Eastern Book Company, 2004, at p. 3

[2] Art. 38: The State shall strive to promote the welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life.

[3] Harjinder Singh v. Punjab State Warehousing Corp on 5 January, 2010

[4] Harjinder Singh vs Punjab State Warehousing Corp on 5 January, 2010

which is their oath of office. The role and obligation of government and judiciary in present welfare era can be understood with the help of few judicial observations like:

- **Ramon Services (P) Ltd. v. Subhash Kapoor (2001) 1 SCC 118**: Justice R. P. Sethi, observed that after independence the concept of social welfare and social justice has become a part of our legal system. This concept gives meaning and significance to the democratic ways of life and of making the life dynamic. The concept of Welfare State would remain in oblivion unless social justice is dispensed. Ensuring social justice and achieving the goals set forth in the Constitution are not possible without the active, concerted and dynamic efforts made by the persons concerned with the justice dispensation system.
- **L.I.C. of India v. Consumer Education and Research Centre and Others (1995) 5 SCC 482**: Justice K. Ramaswamy observed that Social Justice is a device to ensure life to be meaningful and liveable with human dignity. The State is obliged to provide to workmen facilities to reach minimum standard of health, economic security and civilized living. The principle laid down by this law requires courts to ensure that a workman who has not been found guilty cannot be deprived of what he is entitled to get. Obviously when a workman has been illegally deprived of his device then that is misconduct on the part of the employer and employer cannot possibly be permitted to deprive a person of what is due to him.
- **Minerva Mills Ltd. v. Union of India1980 AIR 1789 1981 SCR (1) 206**: The court upheld the importance of Article 38. The court refused the contention that a law which fulfils the directive of Article 38 is incapable of abrogating fundamental freedoms or of damaging the basic structure of the Constitution in as much as that structure itself is founded on the principle of justice, social, economic and political. The court observed that any law enacted for giving effect to a Directive Principle with a view to furthering the constitutional goal of social and economic justice, there would be no violation of the basic structure, even if it infringes formal equality before the law under Art. 14 or any Fundamental Right under Article 19.
- **Ramana Dayaram Shetty v. The International Airport AIR 1628, 1979**: To-day the Government, is a welfare State, is the regulator and dispenser of special services and provider of a large number of benefits, including jobs contracts, licences, quotas, mineral rights etc. The Government pours forth wealth, money, benefits, services, contracts, quotas and licences. The valuables dispensed by Government take many forms, but they all share one characteristic. They are steadily taking the place of traditional forms of wealth. These valuables which derive from relationship to Government are of many kinds. They comprise social security benefits, cash grants for political sufferers and the whole scheme of State and local welfare.
- **V. Punnan Thomas v. State of Kerala AIR 1969 Ker 81**: Justice Mathew observed that the Government is not and should not be as free as an individual in selecting the recepients for its largess. Whatever its activity, the Government is still the Government and will be subject to restraints, inherent in its position in a social and democratic society. A democratic Government cannot lay down arbitrary and capricious standards for the choice of persons with whom alone it will deal.

SOCIAL WELFARE AND WELFARE STATE

A welfare state denotes a concept of government, in which the State plays a key role in the protection and promotion of the economic and social well-being of all of its citizens, which may include equitable distribution of wealth and equal opportunities and public responsibilities for all those, who are unable to avail for themselves, minimal provisions for a decent life. It refers to “Greatest good of greatest number and the benefit of all and the happiness of all”. It is important that public weal be the commitment of the State, where the State is a welfare State. A welfare State is under an obligation to prepare plans and devise beneficial schemes for the good of the common people. Thus, the fundamental feature of a Welfare state is social insurance. Anti-poverty programmes and a system of personal taxation are examples of certain aspects of a Welfare state.

A Welfare State provides State sponsored aid for individuals from the cradle to the grave. However, a welfare state faces basic problems as regards what should be the desirable level of provision of such welfare services by the state, for the reason that equitable provision of resources to finance services over and above the contributions of direct beneficiaries would cause difficulties. A welfare state must attempt to provide all facilities for decent living, particularly to the poor, the weak, the old and the disabled i.e. to all those, who admittedly belong to the weaker sections of society. Articles 38 and 39 of the Constitution of India provide that the State must strive to promote the welfare of the people of the state by protecting all their economic, social and political rights. These rights may cover, means of livelihood, health and the general well-being of all sections of people in society, especially those of the young, the old, the women and the relatively weaker

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sections of the society. These groups generally require special protection measures in almost every set up[1]. The happiness of the people is the ultimate aim of a welfare state, and a welfare state would not qualify as one, unless it strives to achieve the same.

A welfare state must serve larger public interest. “Salus Populi Suprema lex”, means that the welfare of the people is the supreme law. A state instrumentality must serve the society as a whole and must not grant unwarranted favour to a particular class of people without any justification, at the cost of others. However, in order to serve larger public interest, the State instrumentality must be able to generate its own resources, as it cannot serve such higher purpose while in deficit. Merely because the appellants have been occupying the suit premises for a prolonged period of time, they cannot claim any special privilege. In the absence of any proof of violation of their rights, such concession cannot be granted to them.

Role of Judges: It is evidently the duty of the judiciary to promote a social order in which justice, economic and political informs all the institution of the national life. This was also made clear in Kesavananda Bharati case by Justice Mathew held that the Directive Principles nevertheless are fundamental in the governance of the country and all the organs of the State, including the judiciary are bound to enforce those directives. The Fundamental Rights themselves have no fixed content and most of them are mere empty vessels into which each generation must pour its content in the light of its experience. The judges are not mere phonographic recorders but are empirical social scientists and the interpreters of the social context in which they work. That is why it was said that while interpreting the land reforms Act, that beneficial construction has to be given to welfare legislation. Justice Krishna Iyer made it very clear that even though the judges are constitutional invigilators and statutory interpreters they should also be responsive to part IV of the Constitution being one of the trinity of the nation’s appointed instrumentalities in the transformation of the socio-economic order. And when the judges decode social legislation, they must be animated by a goal oriented approach and the judiciary is not a mere umpire, as some assume, but an activist catalyst in the constitutional scheme.

Justice Singhvi opined that court has a duty to interpret statutes with social welfare benefits in such a way as to further the statutory goal and not to frustrate it. While doing so court should make an effort to protect the rights of the weaker sections of the society in view of the clear constitutional mandate. It was opined that while interpreting any social welfare legislation, the court should adopt a beneficent rule of construction[2].

Social legislations are primarily meant for welfare of the particular section of the society and it should be construed liberally so as to advance the cause of the public at large. It was further observed that whether statute is a directory or mandatory would not be dependent on the user of the word ‘shall’ or ‘may’. Such a question must be posed and answered having regard to the purpose and object it seeks to achieve. The construction of statute will depend on the purport and object for which the same had been used.

In present 21st Century the Indian Judiciary is committed towards Key National Social Challenges

In addition to the traditional judicial functioning and judicial duties the social contribution of the judiciary, responding to the unique social mandate entrusted to it is noteworthy. The key social challenges of nation are as follows

1. The challenge to ensure that everyone enjoys fundamental rights guaranteed under Part III our constitution and they do not remain mere promises on paper.
2. The challenge to deal with poverty alleviation and securing social justice in line with the social vision of Part IV of the Constitution especially when the majority of people suffer from ignorance, poverty, disease, hunger, deprivation, discrimination, social exclusion, denial of civil and political rights as well as inadequate access to basic needs and public goods such as nutrition, health, water and education.
3. The challenge to strengthen the social structure in the line of the vision of fraternity, dignity and unity as contained in the preamble and the principles as elaborated in Part IV-A of the Constitution. At the same time, to overcome troublesome forces such as casteism, communalism and regionalism, which still effectively exist in our country, there is a need to strengthen the institutions of the individual, family, community and nation by infusing them with constitutional values and mandates.
4. In present globalised and modern era, crime, criminality, impunity, insurgency and terrorism are major threats to nation. On the other hand, criminal justice remains hazy for a large section of people including under-trial prisoners. This is a challenge for the Judiciary.

[1] Dantuluri Ram Raja & Ors. v. State of Andhra Pradesh & Anr., AIR 1972 SC 828

[2] Lalappa Lingappa and others vs. Laxmi Vishnu Textile Mills Ltd. reported in AIR 1981 SC 852

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5. The challenge of environmental protection and conservation so as to preserve and protect the rich heritage of nature in the face of growing demand for its irresponsible consumption needs to be addressed.
6. The challenge to strengthen constitutional governance, principles of democracy and the rule of law despite of diverse threats such as corruption, lack of accountability and disregard for the rule of law is to be resolved.
7. The challenge of catalyzing investment and economic growth. A continuous, equitable, fair, people-friendly and environment-friendly economic growth in long-lasting periods.

CONCLUSION

Our judiciary has been continuously trying to resolve the national challenges as it is constitutionally committed to ensure ultimate welfare of society at large. The judiciary has delivered a clear message to the executive and the legislature that every organ must respect and honour common peoples' rights and have to comply with the constitutional, social, legal and moral mandates. And interestingly in the 21st century, as new challenges are emerging such as creation of new rights and the expansion and deepening of existing rights essentially required to meet the needs of the new social, political and economic conditions in the national and global scenario, ensuring the effective implementation of these rights including the availability of ready access to remedies against injustice at the local level, in other words 'taking justice to the door step' of common people. Our judiciary has not only defined but also expanded the concept of welfare of people and obligation of welfare state. Hence judges are also designated as Social Engineers.

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A STUDY OF EFFECTIVENESS OF LAWS FOR THE SAFETY OF WORKING WOMEN

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ABSTRACT

A woman is a full circle. Within her is the power to create, nurture & transform. She is Laxmi + Janani + Durga + Ardhangini.

It is indeed an irony that women who are considered to be Goddess of wealth, power & knowledge in India are being treated in the most pathetic way. Their life is a nightmare as they are being subjected to treatment which is not even fit for animals. Inspite of so many laws, the issue of safety of women is a major concern as their plight is questionable & pitiable. This Research paper looks into the provisions of law that have been passed & its effectiveness in securing safety for working woman. A sample size of 50 for primary data & use of secondary data is also made for this research. A pragmatic & holistic approach towards safety & security of working woman at the workplace is the need of the day which needs serious consideration & implementation.

Keywords: safety, laws, mentoring, issues & challenges

1. INTRODUCTION

- With increasing involvement of women in the total workforce, the workplace has become more gender diverse. It is therefore necessary for organizations to ensure that women force is safe at work. While physical safety and security is an important aspect of all the workforce, corporates are also serious about addressing the issues around sexual harassment at workplace.

  Women safety is a subject of prime importance for most organizations today. Recent episodes of harassment at workplace have also raised an aggressive debate nationwide on the importance of safety concern of working woman at the work place. With the ever increasing number of women joining the workforce, it has become critical for organizations to reinforce the need to foster safer environment to work. The growth in tier two and three cities in respect of work opportunities and also breaking the myth of glass ceiling has also contributed to a higher number of women making a mark into the corporate world. Thus, a strong standpoint toward fostering a safe environment and addressing workplace harassment issues can help in building a safer work environment in India.

- The Government has also shown its commitment to push the corporates on compliance with various acts pertaining to women safety, especially sexual harassment, through strict regulation and enforcement action. These include setting up Internal Complaint Committees (ICCs) in organizations to address grievances and resolve complaints around sexual harassment at the workplace, creating awareness campaigns and conducting training programs across all levels in an organization. The Industry is also reinforcing the initiates of the government by showing their concern and coming up with their own mechanism. Their sentiments towards these crucial issues by way of accounting for, & proactively indicating that the crackdown on the issue of women safety is being taking very seriously though a gradual process.

  With increasing representation of women in the total workforce, the workplace has become more diverse. It is therefore imperative for organizations to ensure that women are safe at work. While physical safety and security is an important aspect, corporates are also serious about addressing the issues around sexual harassment at workplace.

- There are provisions regarding the same in the Constitution of India and several enactments too passed. For this Research paper the following 2 major initiatives are being considered.

  The 2 land mark initiatives of the Government are the passing of The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 & implementation of the Vishakha Guidelines.

1) Vishakha Guidelines

Prior to 1997, a person facing sexual harassment at the workplace had to lodge a complaint under Section 354 of the Indian Penal Code 1860, which deals with “criminal assault of women to outrage women’s modesty” and Section 509, which punishes an individual/individuals for using a “word, gesture or act intended to insult the modesty of a woman.”

Sexual harassment as explained by the Guidelines
Sexual harassment includes such unwelcome sexually determined behavior (whether directly or by implication) as

- Physical contact and advances
- A demand or request for sexual favours
- Sexually coloured remarks
- Showing pornography/sending of lewd messages or gestures

2) **The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013** was enacted to ensure a safe working environment for women employees with all the necessary mechanisms for safety and security in place. Thus, it is important that the Act is implemented effectively.

Applicability of the Act
At the "workplace," which includes "any place visited by the employee, arising out of, or during the course of employment, including transportation provided by the employer."

Employer's responsibility

a. Provide a safe working environment
b. Constitute an IC
c. Display the penal consequences of sexual harassment at a conspicuous place in the workplace
d. Organize orientation programs for the members of the IC
e. Organize awareness programs for employees

❖ **Need and importance of an Internal Committee in an organization**

The provisions of the Act mandate the constitution of an IC for all establishments with more than 10 employees. It also says that IC must be constituted at all administrative units or offices in all states. Since ICs have the authority to handle these cases internally, they can take advantage of the reconciliation provisions in the Act before commencing inquiries at the request of distraught women employees and solve the matter internally to avoid any public damage.

According to an EY survey published in 2015, titled Reining in sexual harassment at the workplace in India, although organizations are attempting to deal with the issue of women safety at workplace, ambiguity and unfamiliarity still prevail in most situations.

3) Additionally, corporates in India should not only encourage but also take a responsive stand to a woman employees' concern regarding any kind of sexual harassment. It is the assurance as well as a responsibility & commitment of the employer to ensure that the workplace is free from sexual harassment. This will ensure that a sense of security prevails among the women employees, resulting in job satisfaction.

2. SIGNIFICANCE OF THE STUDY

There is an alarming rate of crimes as well as harassment being committed against working women in spite of various laws passed for their safety. One of the major is lack of awareness amongst women and many a time apathy on the part of the organization in taking care of their women employees. This research paper tries to bring forth the issues & challenges of the safety & security of working women and some suggestions for their safety.

3. OBJECTIVES

(1) To understand the laws relating to safety of working women

(2) To understand the issues & problems faced by working women in respect of their safety

(3) To analyze the awareness of various safety provisions for working women

(4) To provide suggestions for effectiveness of safety provision for working women.

4. RESEARCH METHODOLOGY

Research Design

(1) **Explanatory & Descriptive Research**: The current research is explanatory in nature as it tries to find cause and effect relationship between safety & effect on performance of working women

(2) Data Collection

Survey method & Interview method is used to collect data from the respondents through questionnaire.

Google form was created -

https://goo.gl/forms/GbNIHBa3Ru1QWhsw2

Secondary data is collected through books, journals and web sites.

(3) Sample:

Convenient sampling technique was to be adopted to collect the sample size of 50 respondents.

The respondents belonged to various sectors.

5. SUMMARY OF FINDINGS & INTERPRETATIONS –

1. Respondents Sector of working –
Education – 34 %, IT – 26%, Service sector – 16 %, Hospitality – 18 %, Others- 6 %

2. Management Level of the Respondents –
Middle level Management – 75.5%, Lower Level – 22.4 % , Top Level – 2.1%

3. Age group of the Respondents –
Between 31-40 - 36%, More than 40 - 22 %, Upto 30 years – 42%

4. Marital Status
Married –70%, Single-18%, Widow-6%, Divorced-6%

5. Work culture in the organization –
Formal – 20%, Informal – 18%, Combination of both – 62%

6. Effectiveness of Communication system
Neutral 32%, Agree 52%, Strongly disagree 6%, Disagree 8%, Strongly agree 2%

7. Organization policy
Close door policy 53.1%, Open door policy 46.9%,

8. Management's attention to problems of women employees -
Yes – 50%, No-10%, Maybe 40%

9. Are suggestions considered by management?
Yes -46%, No – 12%, Maybe – 30%

10. Overtime work
Yes – 44%, No – 26%, Maybe – 30%

11. Grievance Redressal Mechanism
Yes- 58%, No -10%, Maybe 32%

12. Organization security policies awareness
Yes-48%, No -22%, Maybe 30%

13. Awareness of laws for safety of working women
Yes-38%, No-34%, Maybe-28%

14. Problems faced by women from
Harassment from Superiors – 53.2%, Harassment from colleagues – 19.1%, Other – 27.7%

15. Existence of Internal Complaint Committee
Yes – 66%, No – 8%, Maybe – 26%

16. Training regarding safety for working women
Yes – 32%, No – 44%, Maybe – 24%

17. Mentoring system
Yes – 78%, No – 8%, Maybe-14%

18. Awareness of Security mechanism
Agree – 56%, Neutral – 30%, Strongly disagree – 8%, Disagree – 4%, Strongly agree – 8 %

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19. Feeling of safety at work
Yes – 54%, No – 46 %

20. Effect of safety concern on performance
Yes – 12.2%, No-32.7%, Maybe – 55.1%

It is alarming to note that 46% do not feel safe and only 32.7% feel that safety concern does not affect their performance negatively. 53.2% experience harassment from their superiors. 44% responded that there is no training regarding safety at workplace. Only 38% are aware of laws for women. 50 % responded that their Management is concerned and pay attention to women issues.

6. CONCLUSION

It is important to understand that it is the fundamental right of every woman to work in a safe and secure environment. Thus, it becomes the responsibility of the entire ecosystem to ensure that there is a conducive environment generated for them. If India is going to be able to effectively contribute

to global gender parity, it is imperative that such laws safeguarding women's rights are upheld, not only in form but also in spirit. It is about time that all stakeholders involved work toward a common goal to achieve this.

Instead of worshipping Goddess during festivals and for religious purpose, it is imperative that they are provided with a safe & secure environment wherein they can focus on their performance and giving in their best.

Though the government as well as organizations are making an attempt to provide a safe working environment for women employees there is a failure in the implementation of the laws for women. There is lack of awareness amongst the women regarding policies as well available mechanisms. The responses also indicate that due to social stigma affected women actually do not complaint. Awareness to be created about Vishakha Guidelines & The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 & implemented rigorously. A pragmatic & holistic approach to be taken by the Policy makers, Implementing authorities, Organizations & its top Management as well a proactive approach by the individuals. At the same time certain suggestions based on the respondent's responses could be considered and acted upon.

7. RECOMMENDATIONS/SUGGESTIONS

From the findings the following are the main issues that have to be streamlined with 360-degree approach by the Individuals, Organizations & the Government

1. Promoting the various laws for safety of women through various platforms
2. Focus on creating awareness of safety provisions
3. Creation of Vigilance committee to oversee implementation of security provisions
4. Taking suggestions into consideration
5. Keeping an open door policy specially in safety issues of working women
6. Adopting Zero tolerance policy in respect of offences against women at work place
7. The Internal complaint committee formation and functioning to be closely monitored.
8. Conducting training & mentoring programs on a regular basis
9. Provision for safety training for self defense
10. Concentrating on promoting an effective communication system in the organization
11. Conducting gender-sensitization trainings
12. Creating an atmosphere where we encourage women to speak up
13. Mandating appropriate work practices
14. Focus on providing safe working conditions
15. Making use of technology for safety
16. Code of conduct in respect of dealing with woman employees.
17. Engaging third-party service providers in matters of safety for women

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A holistic & pragmatic view to be taken as – "People often believed they were safer in the light, thinking monsters only came out at night. But safety – like light – is a façade."

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THE IMPACT OF DIGITALIZATION ON LIFE INSURANCE AGENT'S BUSINESS

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ABSTRACT
The Life Insurance Companies introduced the automated technology in order to survive in the market and to satisfy the needs of the customers, which led to Digitalization of this sector. Agents play a crucial role to increase the sales of this sector and they receive monetary and non-monetary benefits for services offered to the Company. Agents should upgrade themselves with the new technology in order to sustain in the market and even which is easy and convenient to use, anytime and anywhere. In this paper we are studying on the impact of digitalization on the agent's business for that primary data is collected from the life insurance agents employed in private or public life insurance companies. Some secondary data about agent's role income / commission earned, quantum of business generated through agents etc could make the paper qualitative.

Keywords: Agent, Life Insurance Companies, digitalization, technology, market.

INTRODUCTION
The Country's Life Insurance penetration was 2.72%, as per The Economic Survey 2018. The major sales of the Life Insurance Products are due to the contribution of Life Insurance agents. The agent plays a pivotal role to sell the life insurance products in the market as company cannot reach directly to customers to provide the better services. Agent sells different types of the life insurance products as per the need of the customers. Agent collects the information of the customer's family and medical background, his current job details, and salary and so on as it is important to fill the forms of the life insurance policy and they has to follow the some protocols while selling the policy in market. Agent is the mediator between the company and the customers and for such service, company pays commission to them. The agent also provides services such as the payment of premiums, helps customers to ease the process of claim settlement and maturity amount.

The company provides other monetary benefits such as paying the mobile bills, travelling allowance, stationary bills, and low interest amount of vehicle loan and so on. If any need arises company assist the agent to sell the product, incase of any doubt arises to customers on policy terms and conditions. Company provides training to the agent if they are launching any new policy in the market. Company always notes that the agent appointed has cleared the exam of the Life Insurance Agent as they should have enough knowledge while selling the product in the market.

The selling the insurance products in the market through agent has contributed the revenue to the company, but it would be an expensive for the customers by paying more premium amount. In present scenario the company launched "Digital Insurance" where anyone can access it easily and conveniently. Due to digital insurance the company provides online services to the customers by one click and different types of Life insurance policies are also available. However, agent finds difficulty to attract the customers as they can purchase online policies anytime and anywhere, even few websites such as money control, policybazzar etc provides suggestions on purchasing of policies so that customers would pay the premium at cheap rates. The reason behind the online services of the company is that they can sell the products in the market at cheap price, have a direct contact with customers, and reduce the mis-selling of product by agents.

In order to survive in the market the agent can adapt the new technology to induce sales. As without agents, company cannot survive in the market and even many people wanted the advice and suggestions of agents while purchasing the policies and even some of the customers not reliable on online facilities. The digital insurance would help the agent to pay premiums; ease to calculate the premium amount, ease to find out the maturity period of the policy, due date of premium, updated information of newly launched policies. But the company should provide the better training to agents on Digital Insurance.

Agents should accept the opportunities of the market, a well positioned agent can survive in any competitive situation and they should understand the current needs of the customers. Even they should have the knowledge to operate the new technology which reduces the physical hurdles, saves time and money.

The automated system provides authentic information in just one click and transparency can be maintained. This technology would upgrade the whole system of the life insurance company from traditional method and agents should accept the new challenges in a positive manner, which help them to retain in this industry.

REVIEW OF LITERATURE

- ✓ Mohammad Reza Banan (2009) E-INSURANCE means the application of internet and information technology for the production and distribution of insurance services. The e insurance has made much more convenient to customers in the way of paying online premiums, updated information related to launching of new policies in the market, claim settlement and so on. But service providers should reduce the internal cost of the organizations by implementing e-insurance which will save the money by reducing intermediaries commission. In developed countries e-insurance proved to be successful by achieving more profit and market share. In this paper author finds out the role and position of the e-insurance in developing countries.
- ✓ Frank Memmo Jr., Oscar Andrade and David Rivero (2015): In this paper authors explain about the effective implementation of digital technology in life insurance would lead to cost control and retention of employees. Adapting the Electronic Signature technology which would simply the process, save paper, reduces cost and easy detection of fraud by providing digital trail and capturing and also identifying bronzing identity markers. Due to digital sales, service provider can easily find the customers who are really need of policy and their preferences, which reduce the travelling cost and even employees, get an opportunity of work from home. The service providers must take efforts to improve the existing system of customer experience model.

OBJECTIVES

- ✓ To study the importance of the contribution of life insurance agent towards sales.
- ✓ To study the impact of Digital Life Insurance on agent’s business.

HYPOTHESIS

- ✓ H0: Digital Life Insurance is not a threat to agent’s business
- ✓ H1: Digital Life Insurance is threat to agent’s business.

RESEARCH METHODOLOGY

In this research paper “Descriptive” type of research method has been used.

- ✓ Primary data was collected by questionnaire survey method based on the pilot study.
- ✓ Secondary data was collected from conference proceedings, journals, magazines to support the research.

DESCRIPTION OF SAMPLE

- ✓ The primary data collected from the respondents who were the Life Insurance Agent employed in LIC, Max Life Insurance, HDFC Life, Bajaj Allianz Life Insurance and so on
- ✓ The sample size is 100
- ✓ Dichotomous Questionnaire was asked to respondents.

DATA ANALYSIS

The following responses are collected from 100 respondents where structured questionnaires were asked to collect the data.

Following Criteria are covered in questionnaire	Yes	No
Q1.Do you prefer online banking as well as online shopping services?	100	0
Q2. Do you know company provides Digital Life Insurance?	100	0
Q3. Do you prefer Digital Insurance in order to promote sales?	93	7
Q4. Do you find any difficulty to operate digital insurance program?	99	1
Q5.Do you make online payment of premium?	98	2
Q6.Are you satisfied with the online services provided by the company?	93	7
Q7.Does company send the information of due list of payment of premium of policyholders?	100	0
Q8.Does company provides training to promote services of Digital Insurance?	99	1
Q9.Does launching of digital insurance affected badly your business?	09	91

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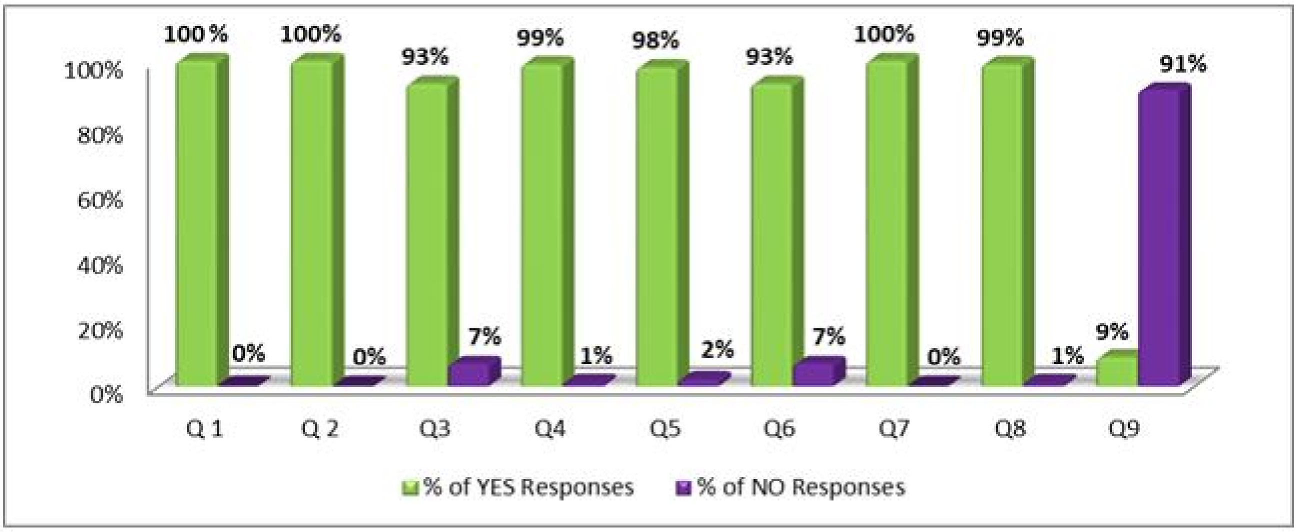

DATA INTERPRETATION

The survey was conducted on the Life Insurance Agents who employed in private life insurance companies or public life insurance companies. Majority of the agents undertaken this job as a part time business in order to earn extra income. Some of the agents were active with their business which means that they consistently able to achieve the targets.

The following are the information collected from the data analysis such as

- ✓ From the Criteria no.1, we come to know that majority of the agents do online banking services and online shopping which shows that they are aware of the internet usage and have the knowledge to operate it.
- ✓ In Criteria no.2; it has been observed that majority of the agents are aware about the availability of online sales of Life Insurance products and if need arises, they can access the information online and help their customers access the same.
- ✓ From Criteria no 3, it has identified that 93% of the agents promote online services as it eases the job of the agents and can avoid unnecessary delays. It helps them for quick conversion of policies through paperless transactions. However not all products of the companies are available online.
- ✓ In Criteria no 4, it has observed that majority of the agents find difficulty to operate online services. At times there no information available for few of their customers. This happens mostly in remote locations where people are not tech savvy; hence, they fail to update the information in their online records. This further impacts customers and agent in terms of checking/availing few facilities online such as Loan availability on policy taken, claim settlement, maturity bonus etc.
- ✓ From Criteria no.5, it has identified that majority of the agents make online premium payment of their customers, which actually ease the job of agents and is convenient to them.
- ✓ From Criteria no 6; it has been observed that 93% of the respondents that mean agents are quite satisfied with the online services offered by the companies. As they can calculate the premium amount, maturity bonus etc of the policies with the help of one click. Any updated information related to any existing policies or newly launched policies can be easily available on the net.
- ✓ From the Criteria no 7; it has been observed that every company sends the detail of premium due list of their policyholders on monthly basis to its agents, in order to intimate agents & its customers about payment of renewal premium.
- ✓ From the Criteria no 8; it has been observed that companies provide training facilities to their agents on new products and also help them with regular guidance to improve their business. Even companies provide regular reward and recognition to boost its agents & employees performance, it also provides non-monetary benefits such as payment of mobile bills, availability of loans at cheap rates, travelling allowance etc.
- ✓ From Criteria, no 9 we come to know that, 91% respondent has responded digital life insurance not badly affected the agent's business as very few people still willing to buy Insurance in India. Insurance has been a push product from the start in our country. Agents still need to personally convince the customers about the need of life insurance and its tax benefits. People also have belief that their details can be misused if they buy it online.

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CONCLUSION

From the Data interpretation we come to know that Null hypothesis (H0) is accepted that the Digital Life Insurance is beneficial to agents and not a threat. It is convenient and easy to operate, information is always available and accurate, reduce in delay of the approval of the policies, paperless transactions and many more facilities available. Some of the agent has the fear that they will lose the job due to the automated technology but the fact is that Agents who grab the opportunities of the market can sustain in this sector. Few problems however exist in the online sales as customers provide their personal and banking details, which can be mis used by hackers for their benefit. Hence, customers approach agent for buying policies though it seems to be expensive but they get after sales services of the agent in future.

For the success of any organization, manpower plays a crucial role, same way without agents, Life Insurance companies cannot achieve the targets as they generate the major revenue of the company and also helps in reaching to the remote areas.

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A STUDY ON LOW ATTENDANCE OF COMMERCE STUDENTS OF MUMBAI UNIVERSITY

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ABSTRACT

This paper entails the factors leading to absenteeism of undergraduate commerce students and thereby to find out suitable solutions and to provide suggestion in order to reduce absenteeism. A descriptive study was done through 150 responses collected consisting of both boys and girls. However, it was seen that there is a significant relationship between demographic pattern of population and absenteeism and also there are multiple factors that lead to absenteeism. The main aim of this paper is to highlight the reason why students do not attend the lectures and give some constructive solutions for the same. Through the study it was seen that mainly due to peer pressure, family and financial problems and low importance to graduate degree commerce impact the student's attendance. The Mumbai University can lay certain guidelines and norms to improve the absenteeism, the colleges Mumbai University must indulge students in certain activities which will motivate them to attend the lectures.

Keywords: descriptive study, peer pressure, pattern of absenteeism, Mumbai University, student's attendance, undergraduate commerce students.

1. INTRODUCTION

In India, there are various courses available for the undergraduate degree college commerce students and even it offers various forms and techniques for gaining knowledge. Though there are technology advancements but still classroom teaching technique is the most effective prevails in the mind set if Indians. However, the factor responsible for ineffectiveness is absenteeism of the students in the classroom. Absenteeism is a habitual pattern of absence from a duty or obligation without good reason. Generally, absenteeism is unplanned absences. Absenteeism has been viewed as an indicator of poor individual performance, as well as a breach of an implicit contract between employee and employer. It is seen as a management problem, and framed in economic or quasi-economic terms.

Although, Mumbai University has laid down certain norms regarding the absenteeism of students applicable for the college affiliated under it still there is observed that many students are not regular every day. This has resulted in a problem for not only the students but also the faculty members. As by missing class students hampers their education and the faculty or lecturer suffers from irregularity of the students in the class. Absenteeism has hampered the discipline among the student of the colleges.

There are various factors or reasons for the student absenteeism in classroom; early or inconvenient lecture timings, commuting from far off places, peer pressure, illness and various other reasons. One important factor is students are completely unknown about what has to be done after graduation which results in ignorance of students towards college.

2. AIMS AND OBJECTIVES

- To identify the characteristics and pattern of absenteeism.
- To identify the factor responsible for absenteeism.
- To give constructive suggestions for improving attendance.

3. REVIEW OF LITERATURE

According to Geeta Paluskar, Pallavi Rege in their reports (2016)

They did a descriptive study on the most significant causes of classroom absenteeism and also aimed to explore its effects on performance of students. The research methodology used by them for data analysis was percentage, mean, chi- square, and Yule's coefficient of association, standard deviation and Z- test. They concluded that if all the factors causing absenteeism are controlled it will improve their performance.

According to Gulap Shahzada, Safdar Rehman, Ghazi Habib, Nawaz Abdullah Khan in their reports (2011)

They studied different causes of high school absenteeism, to sort out social, economic and political factors involved in student's absenteeism. They found that the negative attitude of the students may be due to lack of relevancy in the school curriculum, teacher failure in motivational techniques, or community, groups or family attitudes towards education seems to be considerable factor in the talent loss resulting from the dropping out of pupils who have high potential. They found that many students complained that they were assigned too much

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homework and there were too many tests and examinations which made it difficult for them to prepare. Leaving aside the incidental factors the general conclusions are that most of the causes are related to the family and community and lastly to the school.

4. NEED OF THE STUDY

Due to increasing ignorance of students towards their class attendance has hampered the study pattern and career goals of the students. Maximum students are unaware of what they want to be in their life or what they want to pursue after graduation.

5. HYPOTHESIS

Hypothesis 1

Ho: There is no significant relationship between demography and pattern of absenteeism.

H1: There is a significant relationship between demography and pattern of absenteeism.

Hypothesis 2

Ho: There is no significant relationship between the factors and absenteeism.

H1: There is a significant relationship between the factors and absenteeism.

6. RESEARCH METHODOLGY

The random method of sampling was used as only 150 responses were collected through online survey.

Primary data: Primary data has been collected through a survey done online using Google forms.

Secondary data: Secondary data has been collected through various websites, journals, articles, etc.

7. DATA INTERPRETATION

- Do you think extra professional courses are the reason for absenteeism in college?
- Does coaching classes reduce the interest of students to attend lectures?
- Do you think regular follow up with parents will help to improve student attendance?
- In your opinion, what are the reasons for student absenteeism?
- Do you think electronic media is responsible for low attendance of students?
- Do you think students bunk lectures under the influence of their friends?
- Do you think borrowing notes is as good as attending lectures?
- Do you think that attendance should not be mandatory and you shouldn't be punished for missing something they are paying for anyway?
- Do you think the syllabus offered in colleges is adequate enough to maintain student's interest in attending lectures?
- Do you think the increase in importance of Professional Degree Courses will help in reducing absenteeism among students?

8. FINDINGS

In total 150 responses were collected, out of which 43% were males and 57% were females.

- 51% of the respondents feel that extra professional courses are the reasons for absenteeism in the college.
- 72.8% respondents feel that coaching classes reduce the interest of students to attend lecture.
- 41% respondents' think that regular follow up with parents will not improve student attendance.
- In the opinion of respondents reasons for not attending lectures are:
  - Health problems- 27.2%
  - Financial issues-7.3%
  - Family problems-14.6%
  - Others-76.8%

- 52.3% respondents think that electronic media is responsible for low attendance of students.
- 22.5% respondents are in the opinion that students do not bunk lectures under the influence of their friends.
- 29% of the respondents feel that borrowing notes is as good as attending lecture.
- 52.3% of the respondents are in the opinion that attendance should not be mandatory and students should not be punished for missing something they are paying for already.
- 49.7% respondents feel that current syllabus is adequate enough to maintain student's interest in attending lectures.
- 60.9% respondents are in the opinion that increase in importance of professional degree courses will help in reducing absenteeism.

8. LIMITATIONS OF STUDY

The research is done considering only 150 respondents. Out of these maximum respondents were from age group 18-25. The research area was concentrated only to Kandivali and Borivali.

9. TESTING OF HYPOTHESIS

Through the tests applied i.e. t-test, the p-values derived were more than 0.05($p>0.05$) therefore the null hypothesis were rejected.

10. FACTORS FOR ABSENTEEISM

- **Commuting and early morning lectures:** The most prominent reason for absenteeism is early morning lectures. Through observation it was seen that student tend to miss first lecture more often. As either they are not able to wake up early or the students who stay far from college are unable to reach on time.
- **Infrastructure:** Students are mostly attracted towards the infrastructure of the colleges. This infrastructure includes canteen, library, open spaces. When there is lack of these services in college or else it is not maintained properly, it affects student's interest to attend college.
- **Health problems:** It was observed that students tend to miss lectures due to poor health. Though it was observed that there very few students with serious illness and most students miss lectures due to cold, fever, lack of energy, weakness and stomach upset due to eating out. (as they are unable to carry enough food for whole day or there is lack of nutritious food).
- **Family:** There are instances where parents are not qualified and now their children are first generation learners, therefore, these parents don't give much importance to education. At times parents are ignorance towards their child's education which affects the interest to attend lectures. It is also observed that parents do not support child's dream and ambitions which hampers their will to study.
- **Finance:** There are instances where students cannot afford education and college fees due to which they either leave their education midway or else sacrifice their dreams. However, there are students who are engaged in some sort of work activity to support their education and for that reason they tend to miss lectures.
- **Peer pressure:** It is observed that student easily get influence by their peer friends. Even if the student wants to attend the lecture under the influence of friends they miss lectures. As for them missing lectures is "cool" and they can enjoy their college life by only missing out lectures.
- **Subject understanding:** Subject understanding and the interest in the subject largely depend upon the teacher. It is important for the teacher to identify the students who do not understand the subject either due to weak fundamentals or due to communication problems. Teachers play a very important part in attendance of students. As if the teacher is efficient enough in the teaching and make the lecture interesting the students tend to sit and attend those lectures.
- **Other activities:** Undergraduate students are mostly involved in either activities of college or various internships. Often commerce students persuading professional degree like CA, CS tends to miss lectures due to coaching and to fulfill the requirements of such degrees. It was observed that the students who enroll themselves for the coaching classes for under graduate tend to ignore college lectures.
- **Electronic media:** It is observed that, the maximum students are always busy on electronic media. The students are always busy on either mobile phones or on their laptop almost all day. This not only hampers their health but also result in student's ignorance towards studies.

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- **Goal valuation:** It is often observed that undergraduate students are not determined towards any goal or aim. As they are not aware what they wish to pursue in their life. This results in ignorance towards studies because they are firm in what subject they should focus. This affects attendance of students in class.
- **Less importance to undergraduate degree:** The undergraduate degree of commerce holds less importance as compared to science. Therefore students are not focused enough to attend as any way the final degree will not fetch them enough benefits.

11. SUGGESTIONS

- There should be a system where in the graduate degree of commerce shall hold professional importance.
- The university must lay certain guidelines to colleges, that there should be frequent meeting with parents regarding the student's attendance. Eg: defaulter meeting.
- To try finding solutions for infrastructural limitations and time restrictions to facilitate students to attend lectures.
- To organize regular health checkup camps and providing affordable and nutritious food on college campus for the students.
- To provide remedial coaching, as well as financial help to students facing family and financial problems.
- To provide vocational training and opportunities for "Earn while you learn" to supplement their family income.
- To counsel students regarding their casual attitude towards education and to make them aware of importance of setting a career goal in life.
- To organize career guidance sessions for students.
- To conduct study tours and Industrial visits for students and to make them aware of application of the subject in the industry.
- To organize quizzes and presentations in class for improving student teacher relationship this in turn will enhance attendance and participation in class.
- To organize teacher feedback followed by measures to improve teacher performance.
- To encourage teachers to attend faculty development programs so as to enhance their skills and performance levels.
- To encourage teachers to explore creative techniques and innovative teaching methods to increase interest of students in subject.
- To provide students with regular guidance about choice of subject according to their preference and capacity to understand.

12. CONCLUSION

Through the survey and data collected it is conclude that, attendance of undergraduate commerce students is a very serious problem. The students are not keen to attend the lectures as they do not find them either interesting or some other reasons. This has resulted in a very low attendance of students. Through the research we concluded that students tend to miss lectures under the peer pressure and family problems. The students do not have their goals set for the future which divert their attention. It was observed that many students complained that they were assigned too much homework and there were too many tests and examinations which made it difficult for them to prepare. Leaving aside the incidental factors the general conclusions are that most of the causes are related to the family and community and lastly to the school. The entire student fraternity is necessary to go through certain changes either is attitude towards study or just come and attend the lectures.

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CLIMATE CHANGE AND SUSTAINABILITY

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ABSTRACT
Climate change is one of the most important environmental challenges, with impact on food production, water supply, health, energy, etc. Meeting climate change requires a good scientific understanding as well as coordinated action at national and global level. The responsibility for greenhouse gas emissions' increase lays largely with the industrialized world, the not so developed countries are likely to be the source of an increasing proportion of future emissions. The forecasted climate change under various scenarios is likely to have impact on food production, water supply, forest ecosystems and health. The adaptive capability of communities likely to be impacted by climate change is low in not so developed countries. To address climate change is to adopt a sustainable development pathway by shifting to environmentally sustainable technologies and promotion of energy efficiency, renewable energy, forest conservation, reforestation, water conservation, etc. The issue of highest importance to not so developed countries is reducing the vulnerability of their natural and socio-economic systems to the projected climate change. It is reasonable to expect that increased forest coverage will help India absorb massive carbon emissions from the atmosphere India and other not so developed countries will face the challenge of promoting mitigation and adaptation strategies, bearing the cost of such an effort, and its implications for economic development.

Keywords: Adaptation, costs, India, mitigation, vulnerability.

INTRODUCTION
For a country that has already been suffering from climate change impacts, the formulation of a policy to tackle the problem should have come in natural course.

The first decade of the 21st century was a period of great churning in terms of the political and economic discussions around climate change. Though there was no institutional pressure, developed countries were badgering not so developed countries to minimize their emissions. In 2007, China released its national plan to address climate change issues, leaving India as the only big not so developed country without such an instrument. As a result, the government wanted a policy instrument before the G8 Summit at Tokyo in 2008 and the Conference of Parties at Copenhagen in 2009.

The government has announced new schemes to meet the climate change objectives. the missions have lost homogeneity and functionality. There are several other challenges that the missions face. One, the monitoring system is either absent or ineffective. Two, the budgetary support by the government is very limited. Considering the scant domestic and international channels for finance, the government needs to mobilise funds from different sources.

India is a large not so developed country with nearly 700 million rural population directly depending on climate-sensitive sectors (agriculture, forests and fisheries) and natural re-sources (such as water, biodiversity, mangroves, coastal zones, grasslands) for their subsistence and livelihoods.

Further, the adaptive capability of dry land farmers, forest dwellers, fisher folk, and nomadic shepherds is very low. Climate change is likely to impact all the natural ecosystems as well as socio-economic systems

INDIA'S IMPORTANCE
The importance of New Delhi's support to the climate pact is seen in the fact that India accounts for over 4% of global emissions and is important for crossing the threshold mark of 55%. The world's top two polluters are the US and China. They both together account for 40% of global carbon emissions, have already ratified the document. Once the 55% barrier is crossed, the climate regime will become legally binding on all signatories after a period of 30 days. Why should India be concerned about climate change? India is a large not so developed country with nearly 700 million rural population directly depending on climate-sensitive sectors (agriculture, forests and fisheries) and natural resources (such as water, biodiversity, mangroves, coastal zones, grasslands) for their subsistence and livelihoods. Further, the adaptive capability of dry land farmers, forest dwellers, fisher folk, and nomadic shepherds is very low. Climate change is likely to impact all the natural ecosystems as well as socio-economic systems as shown by the The latest high resolution climate change scenarios and projections for India, based on Regional Climate Modelling (RCM) system, known as PRECIS developed by

Hadley Center and applied for India using IPCC scenarios A2 and B2 shows the following:

- An annual mean surface temperature rise by the end of century, ranging from 3 to 5°C under A2 scenario and 2.5 to 4°C under B2 scenario, with warming more pronounced in the northern parts of India.
- A 20% rise in all India summer monsoon rainfall and further rise in rainfall is projected over all states except Punjab, Rajasthan and Tamil Nadu, which show a slight decrease.
- Extremes in maximum and minimum temperatures are also expected to increase and similarly extreme precipitation also shows substantial increases, particularly over the west coast of India and west central India.

INDIA'S POLICIES ON CLIMATE CHANGE

India has introduced a number of policies that work towards climate change control by reducing or avoiding green house gas emissions. In June 2008, Indian government released India's first National Action Plan on Climate Change, which identified eight core "national missions" running through 2017. Since taking office in May 2014, the present government has taken steps to scale up clean energy production and has initiated a shift in India's stance in international climate negotiations. One of the government's first acts was to rename the environment ministry the Ministry of Environment, Forests and Climate Change. The Prime Minister's Council on Climate Change launched new initiatives on coastal zone management, wind energy, health and waste-to-energy.

RENEWABLE ENERGY

At the federal level, India has implemented two major renewable energy-related policies. First, the Strategic Plan for New and Renewable Energy, which provides a broad framework. Second, the National Solar Mission, which sets capability targets for renewables.

Solar

In November 2014, the Indian government announced that it would increase the solar ambition of its National Solar Mission to 100 GW installed capability by 2022. It will amount to a five-time increase and over 30 times more solar than it currently has installed. Concurrently, the Indian government has also announced its intention to bring solar power to every home by 2019. For this purpose, the government has invested in 25 solar parks, which have potential to increase India's total installed solar capability almost tenfold.

Wind

The Twelfth Five Year Plan proposes a National Wind Energy Mission. It is similar to the National Solar Mission, and the Indian government recently announced plans to enhance wind energy production to 50,000 to 60,000 MW by 2022. The government is also planning to promote an offshore wind energy market.

TRANSPORTATION

In early 2014, India announced new vehicle fuel-economy standards (Indian Corporate Average Fuel Consumption standard). Biofuel legislation has set a target of 20 percent blending of ethanol and biodiesel in 2017. Apart from, India has done away with BS III vehicles which would help in controlling air pollution.

SMART CITIES

Present government has launched an initiative to create 100 "smart cities" with better transport systems, utilities, and energy networks to address the challenges of urban growth. India's National Mission on Sustainable Habitat also includes initiatives such as the Energy Conservation Building Code, mandated for commercial buildings in eight states, and actions to support recycling, waste management, and improved urban planning. Much of the new growth in electricity production will be fueled by domestic coal resources; however, there is worldwide hesitation about increased coal use, as coal combustion emits greater carbon dioxide (CO_2) which will exacerbate climate change.

OBJECTIVES OF THE STUDY

1. Know about the changes in climate and their causes
2. Learn about global warming , its bad impacts and control measures
3. Learn about acid rains, their causes , bad effects & control measures
4. Know about Ozone layer depletion in stratosphere it causes & bad effects and control measures
5. Learn about Nuclear accidents & Holocaust and control measure
6. Study sustainability.

RESEARCH METHODOLOGY

The above paper is based on secondary data research based on a articles and books and papers written.

FINDINGS

- Many uncertainties continue to limit the ability to detect, attribute and understand the current climate change and to project what future climate changes may be, particularly at the regional level. Further, there is a need to link physical climate bio geochemical models with models of the human system in order to provide better understanding of possible cause effect–cause patterns linking human and non-human components of earth systems.
- Improved understanding of the exposure, sensitivity, adaptability and vulnerability of physical, ecological and social systems to climate change at regional and local level.
- Evaluation of climate mitigation options in the context of development, sustainability and equity at regional, national and global level in different sectors (energy and non-energy).
- To develop sustainable and equitable international protocols, mechanisms and financial arrangements to promote mitigation and adaptation to achieve the goals.
- Climate change and sustainable development Sustainable development has become part of all climate change policy discussions at the global level.
- Adoption of cost-effective energy efficient technologies in electricity generation, transmission distribution, and end-use can minimize costs and local pollution in addition to reduction of greenhouse gas emissions.
- Shift to renewables, some of which are already cost effective, can enhance sustainable energy supply, can minimize local pollution and greenhouse gas emissions.
- Adoption of forest conservation, reforestation, a forestation and sustainable forest management practices can contribute to conservation of biodiversity, watershed protection, rural employment generation, increased incomes to forest dwellers and carbon sink enhancement.
- Efficient, fast and reliable public transport systems such as metro-railways can minimize urban congestion, local pollution and greenhouse gas emissions.
- Adoption of participatory approach to forest management, rural energy, irrigation water management and rural development in general can promote sustained development activities and ensure long-term greenhouse gas emission reduction or carbon sink enhancement.
- Rational energy pricing based on long-run-marginal cost principle can level the playing field for renewable, increase the spread of energy efficient and renewable energy technologies, and the economic viability of utility companies, ultimately leading to greenhouse gas emission reduction.

CONCLUSION

Three critical components in promoting sustainable development are economic growth, social equity and environmental sustainability. Policy makers in not so developed countries often perceive a trade off between economic growth and environmental sustain-ability. However, there is a growing evidence to show that environmental conservation for sustainability of natural resources is not a luxury but a necessity when considering long-term economic growth and development, particularly in the least developed countries. There are many ways to pursue sustainable development strategies that contribute to mitigation of climate change. Sustainable development has become an integrating concept embracing economic, social and environmental issues. Sustainable development does not preclude the use of exhaustible natural resources but requires that any use be appropriately offset. This concept is not acceptable to many not so developed countries since it seems to disregard their aspirations for growth and development. Further, sustainable development cannot be achieved without significant economic growth in the not so developed countries.

India has a vulnerable position when it comes to its condition of climate deterioration. The reason is India is a large country with many living in poverty, inadequate infrastructure, and a lack of government planning to deal with complex weather systems. A recent World Bank report showed how India will be subject to flooding, irregular monsoons, rising sea levels, and higher temperatures. The monsoon season is vital to the Indian economy because many Indians are agrarian.

Climate change is going to continue to create uncertain extremes throughout the monsoon season. Preparation for weather irregularities brought by climate change is thus essential to protect the lives of the Indian people and the growth of the Indian economy.

India has tried to balance its carbon emissions with its economic growth objectives by not setting an outright pollution reduction goal. But, being a part of the global climate change regime, India will have significant obligations to meet under the treaty. The country will have to reduce its carbon footprint by 33-35% from its 2005 levels. This has to be achieved by 2030.

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COMPARATIVE STUDY ON QUALITY EDUCATION BETWEEN ACCREDITED AND NON-ACCREDITED B-SCHOOLS

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ABSTRACT
Education holds the key role in the development of any nation. It is the fundamental enabler of the knowledge economy. Competition is growing and in order to mark its presence in global market, India needs to produce professionals with absolute global business lookout. The present academic scenario doesn't entirely fulfil this requirement of practical exposure to students even after completion of their degrees. The quality of Education in B-School has been proving inefficient in developing the suitable employability.

Various studies have also indicated low degree of employability of Indian graduates, which is a matter of serious concern for all the stakeholders. In this situation, improvement in quality is an imperative and quality assurance is the first step in this direction. Accreditation of B-Schools is an important tool to enhance the Quality of Education. It plays an important role in monitoring and improving the quality of education in Institutions which helps them to survive in the dynamic and competitive market.

This paper seeks to understand the mechanism and importance of accreditation of B-schools and help in comparing Quality Assurance between Accredited and Non-Accredited B-Schools. The study has been carried out considering the Quality of Education that is being deteriorating in last 5 years. It was discipline study and conducted in 60 AICTE approved Second and Third Tier B-Schools, of Maharashtra.

Keywords: Accreditation, Employability, knowledge Economy, Quality education.

1. INTRODUCTION
India has one of the largest higher education systems in the world, with 760 University, 38498 Colleges and 12276 Stand Alone Institutions, out of which 2.86 million students enrolled at PG Level and 547386 students enrolled for Management Programs1. Is the business world ready to accommodate all these and many more who walk out after several other courses into the job market?

The corporate world is very competitive and demands quality. How many of the students passing out from a B-School are eligible to rigours the challenge of the corporate world.

Higher Education especially Education in Management is losing its sheen. Reason being that most MBA's are not fruitfully employed after completion of their Studies. Reason cited by corporate is that most MBA's are not ready for the corporate world and need further practical training.

Now the question arises as whether these existing Management Institutions are really able to provide quality education to the students and make them fit to face the challenges of the corporate world?

1.1 Importance of quality Education:
Quality education is important because of the following factors

- Competition; Customer Satisfaction; Maintaining Standard; Accountability; Improve Employee Morale and Motivation; Credibility, Prestige and Status; Image & Visibility

Accreditation processes are also accountable in enhancing the knowledge and improving the quality of Education. .

1.2 Accreditation
- **Accreditation has a direct impact in** development of any B-School. It is a process of external quality review used by higher education to scrutinize colleges, universities and higher education programs for quality assurance and quality improvement.
- "Accreditation is a system for recognizing educational institutions and professional programs for a level of performance, integrity and quality that entitles them to the confidence of the educational community and the public".

2. LITERATURE REVIEW
- Dr. Gonda (2014), concluded that majority non-granted colleges have become economically unviable which is affecting adversely on the quality of college education resulted in developing unemployment graduates.

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- Sharma Deepti (2014), concluded in her PhD thesis, the different factors involved in measuring Quality Education in Management Institutions. The study also discussed about the SERVQUAL Gap Model of Quality Education, but it can be further explore by studying the impact of accreditation on Service Quality.
- Mann, J.S (2014) reflected on the facts how corruption effect on the quality of Education & Research in India. He concluded that a teacher is trained pilot of education and competent to fly the quality of education and research. The corruption in terms of admitting the candidates at Institutes Level seats and the corruption in appointment of teachers badly effects on the quality of education.

3. PROBLEMS DEFINITION

- The craze of Management Program is gradually reducing in last few years..
- Qualities of Education in B-Schools are detoriating Day by Day.
- Students with MBA's Degree are not able to get a satisfactorily job.
- The Corporate World feels that the MBA's today do not possess the skills required to face the challenges in the dynamic and competitive market.
- Management of many B-Schools are not keen to go for Accreditation.

4. OBJECTIVE OF THE STUDY

- To study the process of accreditation, its benefits to the academic institute and flaws in the process of accreditation.
- To study if accredited B schools are providing quality education as compared with Non- Accredited B Schools.
- To Study if Accreditation is academically strong to provide quality based learning to the students

5. HYPOTHESIS

$H_0$1: There is no significant difference in quality of education between Accredited B- schools and Non-Accredited B Schools.

H_A1: There is significant difference in quality of education between Accredited B- schools and Non- Accredited B Schools.

$H_0$2: There is no significant difference in Infrastructures and other facilities in Accredited and Non-Accredited B-Schools.

H_A2: The Infrastructures and other facilities in Accredited B-School are better than Non-Accredited B-Schools.

6. RESEARCH METHODOLOGY

6.1. Methods- Survey method was used. The questionnaire was based on the input which consists of the teaching methodology, faculty knowledge and Infrastructure of B-Schools. Each Questionnaire was objective type with options which was measured on likert- scale basis. Data were collected from both Primary and Secondary sources.

Primary data were collected from Management students which include those who are studying in first Year or Second year of MBA. B-Schools selected from all the following 5 regions of Maharashtra as per the regional offices of "Directorate of Technical Education (DTE, Maharashtra)" which include the following cities:

(i) Mumbai (ii) Pune (iii) Nagpur (iv) Aurangabad (v) Amravati (vi)Nashik

Secondary data were collected from different relevant previous Research thesis, relevant websites, newspapers, magazines, and research articles.

6.2. Sampling

6.2.1. Universe- Second and Third Tier Autonomous B-Schools or/and University Affiliated B-Schools. It includes both accredited and Non-Accredited.

The B- Schools having second and Third Tier type were selected for the study. Third Tier includes B-Schools which are established in last 7-10 years or have vacant seats of minimum 20% of total Intake capacity in last 3-5 years. The institutions selected for study include both University affiliated colleges offering MBA, MMS Degree as wells as Autonomous Institutions offering AICTE approved PGDM.

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In Mumbai, University of Mumbai offers Master of Management Studies (MMS) instead of MBA. PGDM offers by AICTE approved Autonomous B-Schools.

6.2.2. Sample Size- *Students- 725*

***a)* Demographical Distribution of B-School**

Program	Amravati	Aurangabad	Mumbai	Nagpur	Nashik	Pune	Total
MMS/MBA	2	2	12	3	2	10	**31**
PGDBM	3	2	10	4	2	8	**29**
TOTAL	5	4	22	7	4	18	**60**

Table-1: Source: Primary Data

b) Sample Distribution of Students

status of Accreditation Vs Location of the College (City) Vs Gender								
Gender	**status of Accreditation**	**Q5. Location of the College (City)**						**Total**
		Mumbai	**Pune**	**Nagpur**	**Aurangabad**	**Amravati**	**Nashik**	
Male	Accredited	105	40	25	5	20	30	225
	Not Accredited	85	70	75	30	15	10	285
	Sub-Total	190	110	100	35	35	40	510
Female	Accredited	75	25	10	10	0	10	130
	Not Accredited	5	55	0	0	25	0	85
	Sub-Total	80	80	10	10	25	10	215
Total	Accredited	180	65	35	15	20	40	355
	Not Accredited	90	125	75	30	40	10	370
	Total	270	190	110	45	60	50	725

Table-2: source: primary data

6.3. SERVQUAL Model for Student's Quality satisfaction

For measuring the student's satisfaction level in Accredited and Non-Accredited B-Schools, SERVQUAL model was used. This Model has been applied to the students to check their satisfaction levels towards management institutions. The model was based on four service quality dimensions based on 27 items; tangible & reliability (12 items), responsiveness (5 items), assurance (5 items) and empathy (5 items).

6.4. Techniques of Selection- Simple Random sampling were used for the study.

6.5. Location of Study

a) Mumbai , ii) Pune, iii) Nagpur, iv) Aurangabad, v) Amravati, vi) Nashik

6.6. Analysis Method- The data collected for study was carefully validated and uploaded on SPSS software for Analysis. Excel was also used for analysis of the data

7. ANALYSIS & FINDINGS

7.1. Hypothesis Testing

7.1.1. $H_0$1: There is no significant difference in quality of education between Accredited B- schools and Non-Accredited B Schools.

	status of Accreditation	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**	**t**	**df**	**Sig. (2-tailed)**
Quality	Accredited	355	3.9331	.35643	.01892	3.588	723	.000
	Not Accredited	370	3.7872	.68209	.03546			

Table-3: Source: Primary Data

For hypothesis testing $H_0$1 (from respondents -students), t-test was used at 95% significant level. Reference table, calculated value of t- 0.00 which is less than 0.05, so

Above inferences claimed Null Hypothesis **H_o1 not accepted i.e H_A1 accepted**.

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7.1.4. $H_0$2: There is no significant difference in Infrastructures and other facilities in accredited and Non-Accredited B-Schools.

	status of Accreditation	N	Mean	Std. Deviation	Std. Error Mean	t	Df	Sig. (2-tailed)
Infrastructure	Accredited	355	3.4873	.82200	.04363	1.720	723	.086
	Not Accredited	370	3.3892	.71275	.03705			

Table -4: source: primary data

For hypothesis testing $H_0$2 , t-test was used at 95% significant level.

Reference table 4, calculated value of t is 0.086 which is greater than 0.05, so

Above inferences claimed Null Hypothesis **H_o2 accepted**.

7.2. **Findings on Overall Service Quality**

Quality of Education is the main aspects for Branding of any Institution, so SERVQUAL Quality test has been done on students to test their satisfaction Gap. The result was analysed through statistical method by finding the difference ion between their Perception (P) and Expectations (E). The Gap (Q) has been calculated as Q=P-E.

Dimensions of SERVQUAL GAP Model			
Sr. No	**Dimension**	**No of Items in Questionnaire**	**Definition**
1	Tangible	6	The appearance of physical facilities, equipment, personnel and communication materials
2	Reliability	6	The ability to perform the promised service dependably and accurately
3	Responsiveness	5	The willingness to help customers and to provide prompt service
4	Assurance	5	The knowledge and courtesy of employees and their ability to convey trust and confidence
5	Empathy	5	The provision of caring, individualized attention to customer

Table-5: Source: Primary Data

SERVEQUAL GAP findings							
		Accredited B-Schools			**Non-Accredited B-Schools**		
Sr. No	**Dimension**	**Mean - Perception (P)**	**Mean - Expectation(E)**	**Gap (Q)**	**Mean - Perception (P)**	**Mean - Expectatio n (E)**	**Gap (Q)**
1	Tangible	4.088	4.3862	-0.2982	3.375	4.3559	-0.9809
	Reliability	4.293	4.302	-0.009	3.782	4.209	-0.427
2	Responsiveness	4.3127	4.3268	-0.0141	3.5324	4.2297	-0.6973
3	Assurance	4.3296	4.3352	-0.0056	3.8378	4.3784	-0.5406
4	Empathy	4.2704	4.1944	0.076	3.6601	4.0027	-0.3426

Table-6: Source: Primary data

Table 6 reflects the facts that the SERVQUAL Quality Gap is more in Non-Accredited B-Schools. The Gap in Non-Accredited B-School is found to be more in Tangible items; it means the students of Non-accredited B-Schools were not satisfied with the Infrastructures' or facilities as provided.

7.3. Findings of Factors affecting Quality of B-Schools

Status f Accreditation		**Teaching Pedagogy**	**Infrastructure**	**Placement**	**Location**	**Faculty**	**Alumni**
Accredited	Mean	4.08	3.55	4.06	2.18	4.11	3.44
	N	355	355	355	355	355	355
Not Accredited	Mean	3.54	3.46	3.82	2.46	4.03	3.45
	N	370	370	370	370	370	370
Total	Mean	3.81	3.50	3.94	2.32	4.07	3.44
	N	725	725	725	725	725	725

Table-7: Source: Primary data

Table 7 shows Mean Value as calculated for Faculty is highest in both accredited (4.11) and Non-Accredited (4.03) B-Schools, whereas mean as calculated for “Location” is lowest in both Accredited (2.18) and Non-Accredited (2.46) B-Schools.

Considering both accredited and Non-accredited b-Schools, Mean value as calculated for Faculty (4.07) is highest as that for “Location” is Lowest (2.32) whereas mean for Placement (3.91) and Pedagogy (3.81) is at 2nd and 3rd position respectively.

8. CONCLUSION & POLICY IMPLICATIONS

The study concluded with the facts that Accreditation helps in marinating certain standards which help in enhancing the Quality of Education which results in better placement of Management students and enhancement of B- School Brand. The Quality of Education is depends on teaching pedagogy, Infrastructures and Industry-Interface of any B-School. Quality of education is better in accredited b-Schools than a Non-Accredited B-Schools.

The students from accredited B-Schools are more confident with practical knowledge and are more capable to face the challenges of today’s competitive and dynamic world.

9. SUGGESTIONS

For sustainability of B-Schools, suggest to go for accreditation which helps in continuous improvement of the Quality. For Improving the Quality of B-Schools suggest to focus on Teaching Pedagogy, Research Activities and strong Industry-Academia Interface.

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SOCIAL IMPACT POLICIES-E GOVERNANCE

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ABSTRACT
E-governance expands to electronic governance, which is the integration of Information and Communication Technology (ICT) in all the processes, with the aim of enhancing government ability to address the needs of the general public. The basic purpose of e-governance is to simplify processes for all, i.e. government, citizens, businesses, etc. at National, State and local levels. In short, it is the use of electronic means, to promote good governance. It implies or suggests the implementation of information technology in the government processes and functions to cause simple, moral, accountable and transparent governance. Through e-governance, the government plans to raise the coverage and quality of information and services provided to the general public, by the use of ICT in an easy, economical and effective manner. The process is extremely complicated, which requires, the proper arrangement of hardware, software, networking and indeed re-engineering of all the processes to facilitate better delivery of services. E-governance can only be possible if the government is ready for it. It is not a one-day task, and so the government has to make plans and implement them before switching to it. Some of the measures include Investment in telecommunication infrastructure, budget resources, ensure security, monitor assessment, internet connectivity speed, promote awareness among public regarding the importance, support from all government departments and so forth. E-governance has a great role to play, that improves and supports all tasks performed by the government department and agencies, because it simplifies the task on the one hand and increases the quality of work on the other.

Keywords: Electronic governance, Information and Communication Technology (ICT), National level, State and local levels, it has a great role to play, it is not a one-day task.

1. INTRODUCTION
E-governance has a great role to play, that improves and supports all tasks performed by the government department and agencies, because it simplifies the task on the one hand and increases the quality of work on the other. E-governance expands to **electronic governance,** and it is an integration of various stand-alone systems and services between government-to-citizen (G2C), government-to-business (G2B), government-to-government (G2G), government-to-employees (G2E) as well as back-office processes and interactions within the entire government framework. Through e-governance, government services are made available to citizens in a convenient, efficient, and transparent manner. The three main target groups that can be distinguished in governance concepts are government, citizens, and businesses/interest groups. In e-governance, there are no distinct boundaries. The basic purpose of e-governance is to simplify processes for all, i.e. government, citizens, businesses, etc. at National, State and local levels. In short, it is the use of electronic means, to **promote good governance.** Through e-governance, the government plans to **raise the coverage and quality of information and services provided to the general public,** by the use of ICT in an easy, economical and effective manner. The process is extremely complicated, which requires, the proper arrangement of hardware, software, networking and indeed re-engineering of all the processes to facilitate better delivery of services. E-governance can only be possible if the government is ready for it. It is not a one-day task, and so the government has to make plans and implement them before switching to it. In India, the main thrust for e-Governance was provided by the launching of NICNET in 1987 – the national satellite-based computer network. This was followed by the launch of the District Information System of the National Informatics Centre (DISNIC) programme to computerize all district offices in the country for which free hardware and software was offered to the State Governments. NICNET was extended via the State capitals to all district headquarters by 1990. In the ensuing years, with ongoing computerization, tele-connectivity and internet connectivity established a large number of e-Governance initiatives, both at the Union and State levels.

2. REVIEW OF LITERATURE
1. **Global Governance by R. K. Iyyar. Publisher: Mahaveer & Sons, New Delhi, 2007:** This book is compilation of innovative and up-to-date material on different aspects of global governance. Increasing globalization has generated a need for better global governance. The issue of global governance therefore warrants serious attention from world communities. Present system to manage political, economic and social affairs needs critical evaluation. Values like freedom, security, diversity, fairness and solidarity need to be defined in the context of globalization. The new system should respect human rights and international rules of law and democracy. The concept of global governance is distinct from Good Governance. Good

Governance is at national level while global governance at international. Global Governance involves ideas and culture redefined by western norms as the world system originated in Europe. Global Market is not a single market but a multitude of markets providing space for different languages, religions and other differentiations.

2. **Nair, M. and Kuppusamy, M. (2004) & (2005):** In a series of empirical research studies, by Nair, M. and Kuppusamy, M. (2004) and Nair, M., Kuppusamy, M. and Davison, R. (2005) highlighted the existence of ICT diffusion disparity between developed and developing countries. The penetration of and access to ICTs is higher in developed countries than in developing countries like India. Despite the failure of e-Government projects, developing countries are also facing many challenges such as lack of a proper ICT infrastructure, lack of awareness about available e-Government services and a lack of citizens' trust in the government as well as the internet, which are basis for e-Governance project failure. Citizens' perception also plays a vital role in the adoption of e-Governance services.

3. **Surendra Kapoor, Prabhu Gollamudi, Nityesh Bhatt, (2010)** in his book titled Widening e-Governance Canvas, covers selected e-Governance Initiatives in India. The book not only includes six invited papers on the theme of Widening e-Governance Canvas but also narrates various e-Governance success stories, which are classified into six categories namely state-level e-Governance initiatives, department level eGovernance initiatives, district-level e-Governance initiatives, G2C e-Governance initiatives, G2G and G2B e-Governance initiatives, and e-Governance success stories of sustainability.

4. **Hassan, H. S. H, (2011)**: in her Ph.D. thesis titled an investigation of e-services in developing countries: the case of e-Government in Egypt examines e-Government service projects and provides insights and learning into how to successfully develop and implement these projects within a developing country, specifically Egypt. The aim of this research is to develop a robust framework to support an efficient e-Government system focusing on the case of Egypt. This is achieved by investigating selected completed and on-going successful initiatives and focusing on the barriers to, and the enablers of, these initiatives. As a result, the nature of successful e-Governmental services initiatives is determined, and solutions to the possible emerging barriers and challenges are developed.

3. AIMS AND OBJECTIVES

1. To know about the term E-Governance.
2. To study the different types of interactions involved in e-governance.
3. To study the challenges involved in E-governance.
4. To increase the interaction between the Government and Citizens.
5. To understand the social as well as economic impacts of e-governance.

1. HYPOTHESIS

H0: E-governance initiatives may not help to reduce the corruption activities.

H1: E-governance initiatives may reduce the corruption activities.

2. RESEARCH & METHODOLOGY

A survey was conducted from students and received feedback from 100 respondents. This paper contains both primary as well as secondary data.

Primary data- Primary Data has been collected by conducting online survey.

Secondary Data- Secondary data has been collected through various websites.

3. DATA INTERPRETATION

Q.1] Have you ever heard about the term E-governance?

YES	NO
80%	20%

Q.2] You access Internet through your

MOBILE	LAPTOP	PERSONAL COMPUTER	TABLET
70%	10%	10%	10%

Q.3] How frequently you access Internet?

DAILY	TWICE A WEEK	FORTNIGHTLY	MONTHLY
80%	10%	0%	10%

Q.4] Do you trust online services?

YES	NO
70%	30%

Q.5] Do you think that is there any difference between E-governance and E-government ?

YES	NO	MAYBE
60%	10%	30%

Q.6] Do you think that E-governance will help reduce corruption activities?

YES	NO	MAYBE
20%	20%	60%

Q.7] Do you think that E-governance will help develop good relationships between the government and citizens?

YES	NO	MAYBE
40%	10%	50%

Q.8] Do you think that E-governance reduces visits to government offices?

YES	NO
90%	10%

4. FINDINGS

1. 80% of the respondents have heard about the term E-governance.
2. 80% of the respondents access Internet from their mobile.
3. 90% of the respondents access Internet daily.
4. 70% of the respondents do trust online services.
5. 60% of the respondents agree that there is a difference between E-government and E-governance.
6. 60% of the respondents are not sure that E-governance will help reduce corruption activities; while 20% of the respondents agree that E-governance will help reduce corruption activities.
7. 50% of the respondents think that E-governance may help develop good relations between government and the citizens.
8. 90% of the respondents agree that E-governance will help reduce visits to the government offices.

5. TESTING OF HYPOTHESIS

Since, it is proved that most of the respondents are not sure that E-governance will help reduce corruption activities, thus, the hypothesis (H0) is accepted.

6. TYPES OF INTERACTION IN E-GOVERNANCE

1. **G2G (Government to Government)**: When the exchange of information and services is within the periphery of the government, is termed as G2G interaction. This can be both horizontal, i.e. among various government entities and vertical, i.e. between national, state and local government entities and within different levels of the entity.
2. **G2C (Government to Citizen)**: The interaction amidst the government and general public is G2C interaction. Here an interface is set up between government and citizens, which enables citizens to get access to wide variety of public services. The citizens has the freedom to share their views and grievances on government policies anytime, anywhere.
3. **G2B (Government to Business)**: In this case, the e-governance helps the business class to interact with the government seamlessly. It aims at eliminating red-tapism, saving time, cost and establish transparency in the business environment, while interacting with government.

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4. **G2E (Government to Employees)**: The government of any country is the biggest employer and so it deals with employees on a regular basis, as other employers do. ICT helps in making the interaction between government and employees fast and efficient, along with raising their level of satisfaction by providing perquisites and add-on benefits.

7. SOCIAL IMPACTS OF E-GOVERNANCE

1. **Increased Transparency and Reduced Corruption:** Although few Governments have explicitly stated transparency as a goal, some transparency gains have been achieved through e-applications. The website received favourable attention in the press and enabled transparency. While there has been initial success. The system allowed the public to track the process from beginning to end. The success of the system is attributed to the commitment from the Mayor, who led the initiative. Another success factor was the reengineering, greater access to information, improved communication with citizens, which led to greater transparency overall.

2. **Increasing Efficiency and Effectiveness of Service Delivery**: Many projects have boasted impressive efficiency gains in terms of cutting the number of steps involved, cutting the timeframe, and reducing the number of agencies that need to be consulted. These gains have been achieved because processes get automated requiring less time.

3. **Empowerment of Rural Communities:** Rural populations are willing to pay a fee for systems that have very clear business or personal uses. Villagers are not enamored of electronic delivery. The uptake depends on whether significant value is being delivered in comparison with the existing ways of receiving information and services. Intermediaries are often needed to respond to the specific information needs of rural citizens and to interpret and disseminate the knowledge from public documents.

4. **Control of Government Expenditure**: Many countries have implemented integrate financial management systems to track and control payments made out of Government treasuries. For example, the state of Karnataka has connected all its 215 treasuries through a satellite based net. Every payment is now centrally authenticated to ensure that a budget provision exists for the payment and that it is not exceeded. Such systems focus on expenditure control, not exploiting the full potential of the system to combat corruption and improve service delivery.

8. CHALLENGES OF E-GOVERNANCE

1. **Low Literacy:** Literacy can be defined as the ability to read and write with understanding in any language. A person who can merely read but cannot write cannot be considered as literate. Any formal education or minimum educational standard is not necessary to be considered literate. Literacy level of India is very low which is a huge obstacle in implementation of e-Governance projects. Illiterate people are not able to access the e-Governance applications; hence, the projects do not get much success.

2. **Services are not accessible easily:** The concept of e-Governance is claiming for increased efficiency and effectiveness of the government, but these goals will be achieved only if the service will be available to the 100% of the citizens. Therefore, every service should be accessible by anybody from anywhere and anytime. Even if the users of Internet are growing but still there is a major part of Indian population, which is not able to access e-Governance activities for variety of reasons, e.g. some people may have limited access to Information and Communication Technologies and devices. Therefore, government has to provide internet access through public terminals as a part of their universal access efforts.

3. **Different Language:** India is a country where people with different cultures and different religions live. People belonging to different states speak different languages. The diversity of people in context of language is a huge challenge for implementing e-Governance projects as e-Governance applications are written in English language. Moreover, English may not be understandable by most of the people. Therefore, it becomes a challenge for the government to write e-Governance applications, which are to be implemented for the whole nation in more than one language so that these may be acceptable to the users of a particular language.

4. **Maintenance of electronic devices:** As the Information Technology changes very fast and it is very difficult for us to update our existing systems very fast. Regulations of different devices and their different characteristics may vary and the system in use must be capable to handle all the emerging needs. Maintenance is a key factor for long living systems in a rapidly changing technical environment.

5. **Privacy and Security:** A critical obstacle in implementing e-Governance is the privacy and security of an individual's personal data that he/she provides to obtain government services. With the implementation of e-

government projects, some effective measures must be taken to protect the sensitive personal information of the people. Lack of security standards can limit the development of e-Government projects that contain personal information such as income, medical history etc.

6. **Low per Capita income:** Per capita income means how much each individual receives, in the terms of money, of the yearly income generated in a country. This refers to what each individual receives if the yearly national income is divided equally among everyone. Per capita income of India is low as compare to the other countries. Therefore, people cannot afford on-line services provided by the government, which is a challenge for implementation of e-governance.

9. CONCLUSION

It is widely known that there are certain administrative and informational advantages of e-governance in terms of the collection and management of information, increase in public knowledge about government programmes and activities, interaction and coordination among state agencies, speed and openness in service delivery, reduction in certain service costs, and maintenance of demographic and economic records. However, beyond these technical merits of e-governance, it has to be assessed in terms of its sociopolitical implications such as the power relations between politicians, public servants and citizens examined. In the case of India, beyond the issue of public access and participation, e-governance has not shown any promising results even in terms of service delivery. In fact, the critics identify quite a number of failures of e-governance in India. Examples of total or partial failure include such cases as the creation of district-level information centres by the National Informatics Centre; the computerization of the Income Tax Department’s tax system; the use of the executive information system in the management of adult literacy programmes. One of the most critical reasons for e-governance being less effective is the problem of citizens’ access to the available information sources such as the internet. Finally, there are some adverse implications of e-governance, including inequality in gaining access to public sector services between various sections of citizens, especially between urban and rural communities, between the educated and illiterate, and between the rich and poor. In this regard, Bangalore, often known as the pride of Karnataka and the ‘silicon valley’ of South Asia, is a classic case where serious divisions among citizens have emerged.

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EMPOWERING EMERGENT MINORITIES AND SOCIAL INCLUSION- THE ROAD AHEAD

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ABSTRACT

Education is the only means by which minorities can be empowered. Education *is a fundamental tool that is used in the existing world to thrive. It's a valuable asset of an individual. It plays an important role in building a prosperous nation and thereby uplifting the socioeconomic status of the Minorities. Empowering the minorities leads to inclusive growth and building a sturdy nation. Muslims have grown as a largest minority in recent years, but the economic and social condition of this community still lags. The government of India has implemented schemes favouring the Muslim minorities, but the very fact is the minorities have been neglected due to lack of commitment towards the development of the community and education as a whole. Thus, this paper suggests the arena that needs attentions and appropriate measures to empower the emergent minorities.*

Keywords: Empowerment, social inclusion, emerging minorities, minority development.

INTRODUCTION

India's 2018 population is estimated to be 1.35 billion as per UN data where Muslims represent India's largest religious minority group at 13%. With a whopping 140 million residents, India ranks 3rd after Indonesia and Pakistan as the largest Muslim population in the world.

As per census of India 2011 Literacy rates are highest among Jains, at 84.7%, followed by Christians (74.3%), Buddhists (71.8%) and Sikhs (67.5%) Hindus (63.6 per cent) and Muslims (57.3 per cent)

However, 42.7% of Muslims in India are still illiterate. For Hindus, the figure stands at 36.3%, the second highest proportion of illiterate people.

Indian Constitution under article 45 had made it mandatory in the year 1950 when the constitution was laid down for all Indians to get education within 10 yrs, however the literacy rate of our country as per census 2011 is only 74% whereas we started with 20% way back in 1950.

This clearly states the current scenario of the lethargic attitude of the Government towards literacy in India.

How would a country prosper if the youths and the upcoming generations are still struggling to achieve their basic education? This is a serious threat to the country which needs to be addressed.

EDUCATION OF MUSLIM MINORITY AND CHALLENGES FACED BY THEM

According to 'Sachar Committee Report' "25% of Muslim children in the age group of 6-14 years have either never attended school or are drop-outs. For children above the age of 17 years, the educational attainment of Muslims at matriculation is 17% which is a matter of concern and looked upon.

As mentioned earlier low education level is a matter of grave concern for the Muslim Community. Since majority of this Community resides in Muslim dominated area has made them easy targets for neglect by government authorities. They have been marginalised by the authorities in providing water, sanitation, electricity, schools, public health facilities, banking facilities, are all undersized in these areas.

This section of the paper discuss the main causes of low levels of education using five indicators namely:

- ✓ Poverty
- ✓ Perception
- ✓ Lack of good quality schools
- ✓ Women education
- ✓ Madarsa education

  - Poverty the main reason for the educational backwardness of Muslims as they are forced to leave their education and earn livelihood for their families. Children are forced to work in their tender age in workshops, garages, small factories, as domestic help to support their families. Parents due to their financial problems cannot afford to continue with education due to which Muslims have the highest dropout rate.

- Perception towards lack of job opportunities in the Private and Government jobs is also a reason for Muslims who do not see any returns from formal education. If we see the data from the Government the recruitment of minorities in Government, Public Sector Banks, Public Sector Undertakings was 8.57% in 2014-15. The failure of providing jobs is another factor that restricts minorities moving them away from literacy.
- Lack of quality schools in Muslim areas are still a concern. Muslims who cannot afford private schools opt for Government run schools and due to lack of quality education, poor teaching, poor Infrastructure, lack of teaching staff they are forced to leave and move to private schools. Families who cannot afford private schools are forced to drop out due to lack of financial assistance. This also clearly shows the marginalisation of this community.
- Women's Education is still a matter of concern due to lack of financial assistance they are pulled out of school either to earn livelihood or to take care of their siblings. Lack of schools in the vicinity also plays a major role of illiteracy amongst the Muslim females. Government schools are mostly primary schools and sending females farther for secondary education parents are sceptical which moves them away from completing education. Due to financial problems only, male child is been educated and females are forced to restrict themselves within four walls or daily chores.
- Madarsa education has become the only source of education where they have been provided with basic education and serves as an instrument where the Government has failed to reach the muslim masses with access to schools. Due to lack of school's students having no option move to madarsa. As per Sacchar Committee report 4% of Muslims attend madrasa. Studying in madrasa keeps them away from main stream education which is again a hindrance in getting quality education. Students who opt for madarsa are usually from Low income group who cannot afford private schools end up going madarsa. Attaining education from madarsa restrict themselves to Islamic studies and deflect them from the mainstream education. This further creates a barrier in pursuing further education.

These were some of the problems that lead to lower education in the emergent community which needs to be treated with utmost priority. It is the responsibility of the government to uplift the backwards classes and pull them to the main stream.

EDUCATIONAL DEVELOPMENT STATUS OF THE EMERGENT COMMUNITY

Access to Elementary Education: It has been observed through various surveys that for basic primary education Muslims have to travel far distant due to lack of accessibility to schools they have higher dropout rates. As per the norms of elementary education primary schools have to be at a walking distance of 1 km and upper primary schools to be at 3 kms several states have adopted to implement Right To Education.

Access to Elementary Education in Rural and Urban Areas by Socio-Religious Communities, 2007-08

RURAL									
Primary Level									
Distance of School	*ST*	*SC*	*OBC*	*Hinduism*	*Islam*	*Christianity*	*Sikhism*	*Buddhism*	*All*
D<1 km	90.1	92.6	92.2	92.5	89.7	72.4	93.3	94.6	91.7
1 km≤D<2 km	6.5	6.1	6.3	6.1	8	18.6	4	4.3	6.5
2 km≤D<3 km	2	1	1.1	1	1.5	6.6	2.5	0.9	1.2
3 km≤d<5 km	0.3	0.2	0.2	0.2	0.5	1.6	0.1	0	0.2
D≥ 5 km	0.8	0	0	0.1	0.1	0.3	0	0.1	0.1
n.r.	0.3	0.1	0.1	0.1	0.2	0.6	0	0	0.1

Source: DISE, National University of Educational Planning and Administration (NUEPA), 2012

From the table above it can be seen that access to primary schools within 1 km is 89.7 which is comparatively less than other communities which states that there is a need for primary schools within the muslim dominated area to increase the enrolment rate.

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ENROLLMENT OF MUSLIM CHILDREN AT ELEMENTARY EDUCATION

Enrolment of Muslim Children in Elementary Education

Year	Enrolment (in crore)			As % of total enrolment at elementary stage			Ratio of Girls to Boys of enrolment of Muslims
	Boys	Girls	Total	Boys	Girls	Total	
2006-07	0.81	0.77	1.58	8.6	9.1	8.84	0.96
2007-08	0.94	0.90	1.85	9.8	10.2	9.98	0.96
2008-09	1.00	0.97	1.97	10.3	10.8	10.51	0.97
2009-10	1.24	1.21	2.45	12.8	13.3	13.05	0.98
2010-11	1.22	1.20	2.41	12.2	12.8	12.50	0.98
2011-12	1.28	1.27	2.55	12.5	13.1	12.79	0.99

Source: Prepared by NUEPA from DISE data

As per the table the enrolment of muslims children in elementary education had gradually increased from 8.84% in 2006-07 to 12.79 in 2011-12. We have still long way to go to increase the enrolment rate for this section.

ENROLLMENT OF MUSLIMS CHILDREN IN MADARSAS

As per the data from District Information System for Education (DISE) there are 5797 recognised and 2392 unrecognised madarsa in the year 2011-12. Overall 24.75 lakh children are enrolled in Madrasas that constitutes 9.7% of children enrolled.

Enrolment in Madrasas, 2011-12

Type of Madrasas	Enrolment		
	Boys	Girls	Total
Recognized	951267	1034725	1985992
Unrecognized	259616	229942	489558
Total	1210883	1264667	2475550

Source: prepared by NUEPA from DISE

MADRASA EDUCATION IN INDIA

The main objective of Madarsa is to provide Islamic education comprising of Fundamentals of Islam, teachings of Prophet and learning of Quran. Teaching in Madrasa is only restricted to Islamic studies where the children are moved away from the mainstream education.

Madarsa run from the money received in Charity (zakat) and donations from the rich and well to do Muslims. 9.7 % of Muslims are enrolled in Madarsa shows the darker picture of the conditions of Muslims. With the money received from the charity they fail to provide quality education and quality standard of living to these low-income group children. Some Madrasa receives Government grants for teachers' salary which is not sufficient to run and compete with the level of education been provided in formal schools.

FACTORS THAT LEADS TO ENROLMENT OF STUDENTS IN MADARSA ARE

- Poverty and low income.
- Free education in Madarsa.
- Lack of access to Government schools in vicinity.
- Lack of awareness amongst the masses.

REFORMATION AND MODERNIZATION OF MADARSA

Madarsa runs on the traditional pattern of providing Islamic education. The role these madarsa plays in providing education in rural areas and to lower income strata cannot be neglected. However, the functioning and the education pattern needs to be revamped and modern education needs to be included in the syllabus.

Without diverting the focus from Islamic studies subjects like mathematics and science needs to be included in the syllabus to create awareness amongst these children. These madarsa should be equipped with modern technology like access to computers with fundamental Islamic studies. Madarsa like Darul Uloom Deoband have started with computer applications and modern subjects like Modern History, Civics, Geography, General Science as so forth. This needs to be implemented in other madarsa as well to combat illiteracy.

Government has introduced schemes to upgrade madarsa education which needs to be implemented for future benefits.

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HINDRANCE TO MODERNISATION OF MADARSA

There are different viewpoints in the society when modernising madarsa is been called upon. Political motive and vested interest of politicians, appeasement of minorities cannot be ruled out which comes as a barrier. Islamic scholars differ with the view of losing out on autonomy and government intervention in the religious teaching.

Islamic scholars and the authoritarian should come up on a common platform to find out a solution. Its the responsibility of the Islamic scholars as well as the Government to safeguard the interest of the Minorities. Its time to work together to achieve a common objective of uplifting the minority and bringing in formal education without hurting religious sentiments or imposing rigid norms.

RECOMMENDATIONS

The recent studies have identified problems pertaining to Emergent Minorities and shows ignorance and illiteracy are the main reason for their socio-economic conditions. However, with implementing certain recommendations can help in uplifting this section.

- Number of Government primary schools to be increased in Muslim dominated areas. This would help poor and underprivileged to gain formal education.
- An awareness has to be created within the community about the importance of formal education and increase enrolment in schools and reducing rate of dropout.
- Special attention to be paid on women education so that they gain formal and complete education.
- NGO'sand Self Help groups can intervene and initiate capacity building programmes and creating awareness amongst the masses.
- Modernisation of Madrasa is important, and Government needs to formulate policies which are feasible and can accommodate both madarsa education and formal education without rigid norms.
- Friday Sermons can be used as a platform to create awareness however this is possible only if the officials and Islamic scholars are on same platform.
- Skill development programmes to be initiated for Muslims who have gained primary education and drop out to develop their skills and provide employment oppurtunities.

CONCLUSIONS

This study highlights the current situation of the Muslim and their economic and educational progress is very crucial for the progress of the country. Education is essential for this community for changing their economic future. Until and unless this community is not educated we will never be termed as progressive as a major chunk of community lies in the preview of darkness. It is time for them to be empowered and enlighten them by giving them formal education. In a Country where there is lack of primary literacy the country and the citizens cannot be benefitted in anyways so it the need of the hour to identify the possibilities of uplifting the Minorities and creating an inclusive environment.

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HIGHER EDUCATION AT THE CROSSROADS: A LOOK INTO THE HIGHER EDUCATION POLICY OF INDIA

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ABSTRACT
This paper aims to look at the higher education scenario of India with special reference to the state of public centres of learning in the wake of a couple of new regulations that the Government of India has brought forth in recent years. The main focus of the study is to ascertain how the new education policy translates in actual functioning of the centres of higher education in India. With the current socio-economic scenario of India, wherein an ever-greater divide is being witnessed between the rich and the poor, access to higher education is a key issue faced by the underprivileged sections of the society. With the new move to dismantle the UGC into HECI and HEFA academic quality and financing has been transferred to two different bodies. Although this move has been initiated in the name of reducing governmental role in the higher education sector, in actual practice it ends up being more regulative and playing to the tunes of the knowledge economy. This would further marginalize the underprivileged sections of the society and would not aid in reaping the full benefits of the demographic advantage that the nation is set to experience in a decade's time.

Keywords: higher education, knowledge economy, quality, public funding, critical political economy.

1. INTRODUCTION

India is all set to witness a rare demographic phenomenon in just under a decade or so. Over 40 per cent of the country's population will be in the age group between 18-23. The average national age would be 29 years, which would be lower than that of countries like the US, and Japan. Although this means a great opportunity for the nation, it comes with its own challenges. By the time India gets a predominantly young population, almost 140 million youth would be in need of higher education. The crucial question here is, whether or not the policy initiatives that the government of India has been making in recent years readies the nation for reaping the benefits of the demographic advantage to the fullest. (Gurukkal, 2017)

How could the policy ideally ensure that the education sector of the country is all set to maximise the benefits of the favourable population scenario? Given the learning system that is being practiced in India, the following measures would best materialize the intended outcome.

1. Strengthen the education system with enhanced state support.
2. Motivate original research by promoting the premises required.
3. Ensure the justified availability of financial aid for the academic sector.
4. Foresee academic excellence through higher academic autonomy.

This paper intends to analyse the recent policy decisions pertaining to the higher education sector to check if the above listed measures are included in them.

2. THE INDIAN SOCIO-ECONOMIC CONTEXT

The Socio-Economic scenario of the country plays a crucial role in deciding the validity of the measures listed above. According to Rajan Gurukkal, "India’s socio-economic situation is characterized by unprecedentedly glaring inequalities (Gurukkal, 2017). This claim is validated by the National Sample Survey Estimates that depict a widening gap between the rich and the poort of the country. This especially true if we compare the urban and the rural population. While healthcare and education proves to be profit making sectors that aid the rich in getting richer, the poor on the other hand finds it difficult to access these basic requirements (Office, National Samples Survey, 2015). This is crucial in deciding how the future policy decisions need to be.

While the number of billionaires in India are on the rise, the number enrolled in higher education has witnessed a considerable fall in recent times (AISHE, 2012). This is no welcome sign as far the country's social well-being in concerned. The MHRD sees academic backwardness and a shortage of higher education institutions as the principal reasons for the low GER (general enrolment ratio.) Citing these reasons the ministry has been boosting private sector in higher education. Mushrooming of private institutions with state-of-the-art infrastructure is what resulted from the initiative of the ministry. Here physical infrastructure is what mattered the most and academic quality is what suffered. This has definitely resulted in an improved GER, but at the cost of academic quality. Another critical factor has gone unnoticed in this ministerial action, the core relation between economic

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poverty and academic backwardness (Gurukkal, 2017). This situation can be tackled only by making the necessary funding available to those strata of the society for whom higher education is a luxury. Whereas, the state should realise how significant it is to ensure that higher education is imparted to these deprived sections of the Indian population.

It is in this socio-economic context that the higher education sector and the recent policies need to be analysed in order to accurately understand the direction in which it is heading.

3. STATE REGULATION AND FUNDING OF HIGHER EDUCATION IN INDIA

The emergence of high market economy wherein education has become an industry from where those who seek it needs to purchase its benefits. The term "knowledge economy" reigns the education sector worldwide. Commercialisation and privatisation of education is a key element in the trade treaties that the developing countries of the world have entered into in recent times. In third world countries, education has become a commodity that demands very high purchasing power. Whereas in the developed countries, this sector is still under state control. In countries like India such commercialisation and privatisation of education has given rise to "serious access disparity with respect to opportunities of knowledge acquisition " (Gurukkal, 2017).

India has seen a gradual withdrawal of the state from social welfare sectors, including education, in the post GATS (General Agreement on Trades in Services) era. Tradability of knowledge is the defining factor in planning and implementing higher education policy in the current scenario. That means the state should formulate ways to tranform implicit knowledge that resides in the brains of the those acquired it into explicit knowledge that can be sold and purchased. This defines the meaning of education as envisaged by the global knowledge economy and this is what the present state apparatus in India has adopted.

The regulation of academic quality and the dissemination of funding in the higher education sector in India had until recently been vested in the University Grants Commission. The UGC, formed in 1956, was split into Higher Education Council of India (HECI) and Higher Education Financing Agency (HEFA) recently. While HECI is responsible for overseeing the academic matters, the HEFA deals with the financing part. The significant change that goes unnoticed here is that, unlike the UGC, HEFA operates in a different style. The mission statement of HEFI records thus, " To provide timely finance at competitive interest rates for capital assets creation in India’s educational institutions and supplement it with grants by channelizing CSR funds from the corporate and donations from others." HEFA is a joint venture between the MHRD, Government of India and Canara Bank. They are "particularly interested in financing the building of educational infrastructure, R&D infrastructure and thereby enabling the institutions to reach top rankings globally (HEFA, 2019)." The ratio of partnership in HEFA is 91:9, where the MHRD retains the major share.

The academic community of the nation has been severely critical of this move. The basic argument that they have raised against this is that funding cannot be independent of the knowledge of academic requirements. Previously the UGC dealt with both these matters, which meant that it had first-hand information on the requirements in academic front and the corresponding financial necessity. Whereas, in the present scenario the funding body needs to be convinced to the financing agency which is by and large run by ex-officio members (heads of different committees) who are directly linked to the government regulations and clippings. Government regulations are important in this matter, but so is academic necessity. The members of the HEFA governing body are seldom informed or concerned about this. Their only focus would be to ensure governmental restrictions being completely imparted in the body. The entire academic community of the state has been voicing their concerns over this. It has been argued that it is impossible to decide on funding properly without knowing the academic requirements (Narain, 2018). HEFA, as its constitution reveals, isn't as much independent from the MHRD as the UGC had been. Further, there had not been worthy dialogues with either the academic community or within the parliament before the policy decision was implemented. Such matters leave enough room to question the legitimacy of the move and also cast a heavy shadow on the actual intention of it.

4. THE IMPLICATIONS OF HECI AND HEFA

What does the dismantling of the UGC actually mean? According to Saqib Khan, " The Ministry of Human Resources and Development’s (MHRD) press note on the draft Act— “less government and more governance”— is a clear ideological indication of further reduction of the government’s role in higher education and the push towards privatization of HEIs. (Khan, 2018)." Autonomy in itself is not a negative thing. Academic institutions do need autonomy to function properly. But that doesn't mean that the state can altogether opt out of its role. The autonomy that is in place now seeks to regulate financing towards a corporate channel and restrict academic independence by forcing market constraints. With funding being transformed into long term loans, it is natural that educational institutions would look for funding from elsewhere. This will naturally be conditioned by the projected requirements of the knowledge economy. While state machinery is said to be freeing its clutch over the academia, it is in fact retaining itself in a stronger way by handling the finances ever so directly as compared to the UGC.

There is a growing concern over the powers vested in the HECI, as well. In the words Prabhat Patnaik, if a university disregarded:

The UGC’s directives then all that the UGC (could) do is to stop its funding. But under the new set up, if an institution disregards the HECI’s recommendations then the HECI can simply close it down. And in extreme cases it can even initiate penal proceedings that can lead to fines on, or imprisonment of, the guilty parties. As the draft legislation states: “non-compliance of directions of the HECI could result in fines or jail sentence under the Criminal Procedure Act. (Patnaik, 2018)

If this is the case, universities will end up more of an arena for enacting what the parties in the government wants rather than centres of higher learning and excellence.

Reading this current scenario in the wake of the socio-economic context of the nation detailed earlier reveals an even more dangerous picture. While access to higher education is already a problematic issue for the less privileged rural population of the country, the corporate dialectics of the new regulations would push these masses further into the edges. Thus, on both the academic and the financial sectors the new regulations seem to be embodying the logics and strategies of the corporate neo-liberal regime.

CONCLUSION

The new educational policy of the Government of India is implemented akin to the the theory of *habitus* that Pierre Bourdieu speaks of referring "to the underlying principles of practices in a given social structure wherein the people rather live them than obeying (Gurukkal, 2017)." It is relevant here to clarify "the way education strengthens the social conformity to the dominant economic agenda (Gurukkal, 2017)" Whereas the policy speaks aloud on how the government intends to make the higher education sector free from its restrictions, its actual implications reveal a heightened control over its functioning and direct application of the logics of the knowledge economy. Such a measure would in no way help reap the benefits of the great demographic advantage that the nation is projected to be getting in less than a decade's time. The state should initiate a thorough revision of the policy if this favourable situation is to prove of any benefit to the strengthening of the nation in the social, economic and academic sectors.

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A STUDY ON ORGANIZATIONAL POLICY TO MANAGE STRESS AMONG WOMEN FACULTY WORKING IN COLLEGES UNDER MUMBAI UNIVERSITY

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ABSTRACT

Rapid Changes in the social setup made women break their boundaries of life and shoulder many responsibilities with more challenges. It was a belief that teaching is the suitable profession as it helps women to balance personal and professional life. But evolution in educational sector with more expectation of stakeholders changed the way of functioning of Educational Institutions. There is a need to identify work stressors among faculty, especially among women to increase effectiveness and job performance, ultimately improving job related well-being.

1. INTRODUCTION

Stress becomes part of life when one leads a fast pace lifestyle. Stress is faced by everyone in the family and profession irrespective of their gender and age. Hans Selye who is credited as being the modern day father of stress defined stress in 1936 as "the non-specific response of the body to any demand for change". Stress experienced when environment and internal requirement are difficult to be managed by an individual. The outcome of stress is inefficient performance in professional life and poor family relation.

Stress is more felt by the person at the time of less support from her co-workers and family members. Women in India are more vulnerable to stress as the social setup expect them to be a good care taker of the family as well as a need for career performance. Balancing of personal and professional expectations under stressed environment lead to mental and physical health issues among women. Evolution in educational sector with more expectation of stakeholders changed the way of functioning of Educational Institutions. There is a need to identify work stressors among faculty, especially among women to increase effectiveness and job performance, ultimately improving job related well-being.

Stress and Teaching Profession

Teaching Profession has undergone ample changes with respect to Environmental and organisational factors. Environmental factor like technology and shifting of educational institution role from mere teaching to multi non- academic responsibilities are few reasons for making teaching profession as a challenge. Numerous factors like long working hours, involvement of physical and mental work, relationship with co-workers, availability of resources, Management and family support are responsible for stress in teaching profession. Sometime it is good to work under pressure which motivates to accomplish the task in time and it is a way for progress. It leads to satisfaction of achievement.

Change in Technology brings access of knowledge at the finger point of students and the teacher deals with students in a classroom who don't like to be present in the class. Non co-operation, un-readiness to learn, students with different learning capacity cause teaching as a challenging and stressful.

Statement of the problem

Complexity in job and life made one's life more stressful. Not attending such issues leads to social problems. The researcher tries to trace out the stressors among women faculties as they are more vulnerable to such problem. The present study attempts to understand the causes, its impact and adopting strategies for minimizing its impact. Education of women plays a significant role in social reformation. Stress felt by students and faculty belong to educational sector leads to job complexity and social pressure. The study attempts to find ways and actions required for developing adaptive behaviour so as to overcome the consequences of stress.

Data Collection

The current study is related to main parameter of work stressor namely organizational factors- nature of work condition, motivation and governing body. Google Form is administered by the researcher to collect the responses. Questionnaire method through Google form is sent to the sample respondents to test the parameters and its impact of performance of faculty. Secondary data is collected through books, journals and web sites. Convenient sampling technique is adopted to collect the sample size of 65 form the population of women faculty of Colleges under Mumbai University.

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2. CAUSES OF STRESS

Numerous factors are responsible for stress and it is classified into four categories namely individual, group, organisational and extra organizational. The current study considers organizational stressors and its impact on work efficiency.

3. ORGANIZATIONAL STRESS AND ITS CAUSES -DATA ANALYSIS AND INTERPRETATION

6.1.Stress * Institution

		Institution			Total
		Private	**Government College**	**Government Aided College**	
Stress	Never	14 (25%)	0	3(43%)	17(26%)
	Moderate	41 (72%)	0	4(57%)	45(69%)
	Often	2 (3%)	1 (100%)	0	3(5%)
Total		57 (100%)	1 (100%)	7(100%)	65(100%)

Correlations - Stress and Institution

		Stress	**Institution**
Stress	Pearson Correlation	1	-.085
	Sig. (2-tailed)		.501
	N	65	65
Institution	Pearson Correlation	-.085	1
	Sig. (2-tailed)	.501	
	N	65	65

6.2 Stress * Administrative and Academic Changes

		Administrative and Academic Changes				**Total**
		By the University	**By the College**	**Both**	**None**	
Stress	Never	0	5(31%)	12(26%)	0	17(26%)
	Moderate	1(50%)	11(69%)	32(70%)	1(100%)	45(69%)
	Often	1(50%)	0	2(4%)	0	3(5%)
Total		2(100%)	16(100%)	46(100%)	1(100%)	65

Correlations

		Stress	**Administrative and Academic Changes**
Stress	Pearson Correlation	1	-.060
	Sig. (2-tailed)		.634
	N	65	65
Administrative and Academic Changes	Pearson Correlation	-.060	1
	Sig. (2-tailed)	.634	
	N	65	65

6.3 Stress * Reaction on Challenging Task

		Reaction on Challenging Task				**Total**
		Ready to take	**Reluctance(Because of fear)**	**Accept with mental stress**	**Avoid it**	
Stress	Never	42(77%)	0	1(11%)	0	17
	Moderate	9 (17%)	1(100%)	8(89%)	1(100%)	45
	Often	3(6%)	0	0	0	3
Total		54	1(100%)	9(100%)	1(100%)	65

		6.4 Opinion on availability of resources			
		Yes	No	May be	Total
Stress	Never	10	6	1	17
	Moderate	31	7	7	45
	Often	2	1	0	3
Total		43	14	8	65

Correlations			
	Stress	Opinion on availability of resources	
Stress	Pearson Correlation	1	-.023
	Sig. (2-tailed)		.855
	N	65	65
Opinion on availability of resources	Pearson Correlation	-.023	1
	Sig. (2-tailed)	.855	
	N	65	65

Categories	Factors	Frequency	Percentage
Stress	Never	17	26.2
	Moderate	45	69.2
	Often	3	4.6
Efforts by University to inform changes in syllabus	Timely Information	18	27.7
	Delayed Information	24	36.9
	Not providing proper information	23	35.4
Impact of Non-academic responsibility on work efficiency	Strongly Agree	26	40.0
	Agree	33	50.8
	Strongly Disagree	2	3.1
	Disagree	4	6.2
Impact of professional commitment on personal life	More Stressful	14	21.5
	Makes me strong	15	23.1
	Systematic	20	30.8
	All	16	24.6
Opinion on Teaching Profession	Noble	14	21.9 %
	Stressful	10	15.6 %
	More non-academic	46	71.9 %
	Suitable for women	9	14.1 %
Efforts taken by the College to bring positive work Culture	Developing a sense of team spirit	31	48.4%
	More Professionalism	25	39.1%
	Sense of belongingness	33	51.6%
	Positive approach	36	56.3%
	Others	1	1.6%
Reasons for non-recommendation of teaching profession to other women	Complex profession	2	11.8%
	More physical and mental stress	7	41.2%
	Balancing of personal and professional life	8	47.1%
	Monotonous	5	29.4%
Reasons for stress	Stay back for long hours without prior intimation	26	40.6%
	More paper work of non-academic nature	33	51.6%
	Multitasking responsibilities at home	13	20.3%
	Multitasking responsibilities at work place	33	51.6%
	poor work culture	10	15.6%
	Commanding attitude of higher authority	12	18.8%
	Less support of family members	4	6.3%

Suggestions to balance personal and work life stress	Flexi time work	39	60.9%
	Providing day care centre for the children	6	9.4%
	Planned meeting within a college hours	38	59.4%
	providing transport	8	12.5%
	Availability of food at subsidised rate	14	21.9%
Factors motivate to continue teaching profession	Monetary gain	25	39.1%
	Feeling of achievement / recognition	43	67.2%
	Social acceptance	20	31.3%
	Feeling of Independence	32	50%
	Time Pass	0	0

1. Stress depends upon organizational policy, challenges and target fixed for achieving it. Women faculty working in private Colleges and Government aided colleges do experience stress. It is proved that there is moderate significant relation between stress and nature of the institution.
2. The researcher found that administrative and academic changes implemented by the College and University make them more stressful and high degree of correlation exists between the variables.
3. People with relevant skill and right attitude show less stress in their profession. The current study proved that majority of the respondents who tend to accept the challenging job with readiness showed no stress when compared to the respondents who are not willing to take challenging job. The study shows correlation between stress and challenging job.
4. With respect to efforts taken by University to update changes in the syllabus, 73% of the respondents expressed that they get either delayed information or not informed about the changes.55.4% revealed that they work beyond working hours to completed the task if information is passed late.
5. Regarding the relation between non-academic responsibility and its impact work efficiency, it is found that there is no co relation between stress and non-academic responsibility.
6. Stress to certain level when it is properly managed it may lead to positive effect. Current study identified that stress help the respondents to be systematic in work and make them more strong.
7. Organizational physical condition is one of the causes for stress. Majority of the respondents' experience moderate stress on non-availability of resources like Projector, AV Room, Computers, E Resources.
8. It is found from the study that teaching become more non-academic.
9. Majority of the respondents agreed that presence of positive work culture is required to overcome stress. They have expressed that it is the responsibility of the college to develop positive approach to bring positive work culture among the faculty.
10. 26% of the respondents replied that they never suggest teaching profession to other women. Reason mentioned by them that difficulty in balancing professional and personal life.
11. When responding to the question on impact of professional life on family life,62.5% of the respondents accepted that they are neglecting household responsibilities on account of professional stress.
12. Flexi work timing and planned meeting are the factors given more priority to balance professional and family life
13. The respondents replied that teaching profession give them the feeling of recognition/achievement and independents. Hence it is clear that teaching profession provide more mental / psychological satisfaction to women faculty more than monetary satisfaction

4. RECOMMENDED ORGANIZATIONAL POLICY

1. **Communication:** Proper timely communication of changes in administrative and academic changes.
2. **Relationship:** Team building activity and developing positive attitude to bring healthy work culture
3. **Planning:** Well planned activities and meeting which enables women to balance professional and personal life.
4. Stress Audit: Encourage the faculty to make a list of work duties and responsibilities, and identify which areas are causing excess pressure. This will also assist in the identification of key stressors and establish the root cause of excessive pressures.

5. Rapport and Support: Allow the faculty to speak openly and honestly will reduce stress levels. Counselling session for women faculty must be implemented.
6. Regulate against permanent overwork: Law prevails is Denmark to reduce the workload can be followed as the timing is one the stressors highlighted by women faculty.
7. Require to measure and report on employee happiness
8. Celebrate best working place by conducting survey

8. CONCLUSION

Teaching is one of the best career for women if it helps them to balance professional and personal life. There are few factors for inducing women to choose teaching as their career, namely, reputed job, fixed timing, healthy environment and knowledge gaining opportunity. Demand for working beyond college hours, multiple responsibilities and less payment are few of the changes undergone by Educational Institutions. This often leads to over whelming pressures and challenges for the faculty, which consequently leads to conflict and stress. Looking at the importance of teaching profession, as the teachers are the builder of the Nation, there is a need to address their problems, stress and finding out ways to overcome from stress. It is the responsibility of the governing body of educational institution and government to march forward for the psychological welfare of the Women faculty in teaching profession

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POLICY INITIATIVES FOR EFFECTIVE SOLID WASTE MANAGEMENT IN INDIA - A CRITICAL REVIEW

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ABSTRACT
Solid waste comprises of hazardous waste, household / municipal waste, biomedical waste and electronic waste, and its generation is increasing at an astronomical rate in India. The factors contributing to the scenario are huge population, industrialization, urbanization, changing lifestyles etc. Each year, the population grew by 3-3.5%, as this factor arises, the rate of solid waste generation also rises up to 1.3 %. An excellent solid waste management also helps in providing a good environment which has low pollutions including air, soil, and water pollution. Thus, there are laws, rules, regulations, legislations and ordinances enforced by the government to make the citizens adhere to as one of the ways of managing the waste generated. The main cities in India like Mumbai and New Delhi have appeared to be in the list of 25 dirtiest cities in the world. The amount of solid waste generated in the cities is much higher than in rural areas. The generation rate in rural areas can be as low as 0.15kg/cap/ day, while in the urban areas the rate can be above 1.0 kg/cap/day. In India the average solid wastes (MSW) generation is approximately 100,000MT/day. Out of that, only 60% (60,000MT/day) is collected by municipal corporations and councils. The rest is disposed in an unscientific manner. This paper gives a critical review of solid waste management policies in India.

Keywords: Municipal Solid Waste. Challenges of MSWM, Policies of MSWM.

1. INTRODUCTION

In olden days, people converted the waste materials into wealth. Raw food waste is dumped into the soil around plants, trees, or added in a backyard pit with the straw bedding from cattle-sheds, to decompose naturally into compost that is fully used in the fields during every monsoon. Cooked food is rarely wasted or is fed to livestock. Until plastics came along to replace leaf or paper packaging, this ancient practice of returning nutrients back to soil was sustainable, profitable and nuisance and pollution free. Plastics render the land less fertile or even un cultivatable, yet cities continue to dump on the outskirts as before. These discarded piles become no-man's land [1]. Natural environment is disturbed and polluted alarmingly because the water bodies and land are turned into dump yards. Generation of solid waste is highly dependent on location, lifestyle, food habits and culture of the inhabitants. For example, location near industrial area will be rich in hazardous waste and those near hospitals will have higher biomedical waste. Rural India has more of agricultural waste and urban places have more of e-waste / plastic / diapers etc. The advent of technology coupled with urbanization increased the e-waste and non-biodegradable waste content in the municipal waste. With growing concerns on the impact of untreated solid waste on the inhabitants and the environment, Government of India has taken prolific steps to mitigate the solid waste generation with stringent rules and policies.

2. REVIEW OF LITERATURE & STASTISTICS OF SOLID WASTE

Municipal solid waste generated can either be degradable or non-degradable with varying proportion of household waste, construction and demolition debris, sanitation residue, and waste from streets. The composition and approximate time taken for their decomposition are given below[2].

Fig.1: Types of Solid waste

Type of waste	Time taken for degeneration
Kitchen waste	One week to two weeks
Paper	10-30 days
Cotton cloth	2-5 months
wood	10-15 years
Woolen items	One year
Aluminium and metal items	100-500 years
Plastic bags	1 million years (?)
Glassbottles	Undetermined

Table-1: Type of waste and time taken for degeneration

It is estimated that by 2050, 50% of the population will be urbanized with the increase in amount of waste generation by 5% per year. CPCB (2012-13) estimated 62mn tones of solid waste generation in India. Solid waste generated in Indian cities has increased from 6mn tones in 1947 to 48mn tones in 1997. With the growing population and urbanization, the amount is estimated to increase to 436 mn tones in 2050. According to

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Ministry of environment, forest and climate change, only 75-80% of waste is collected systematically and only 22-28% are processed and treated. Some of the challenges faced in systematic and scientific treatment of the waste are improper planning, complex institutional set up, insufficient waste management systems and limited funds [3]. A schematic representation of municipal solid waste management in India is given below [4].

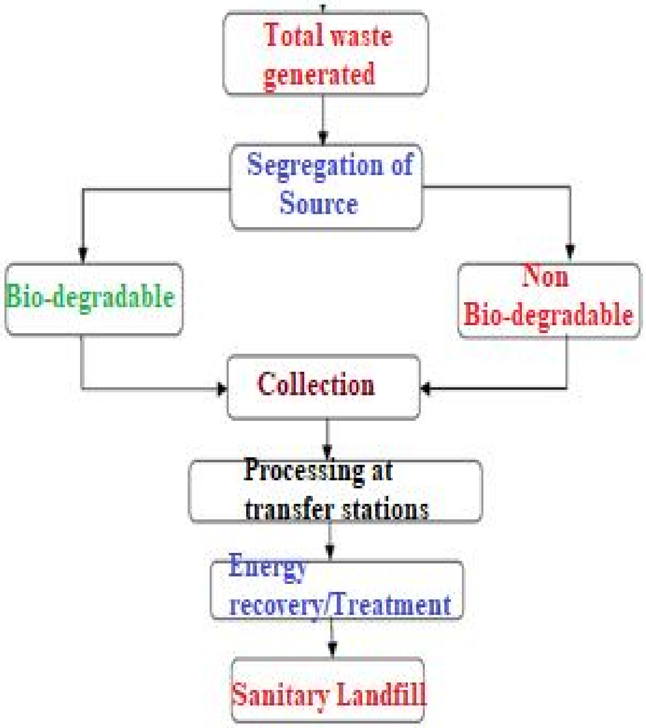

Fig.2: A schematic representation of MSW in India

3. CHALLENGES OF SOLID WASTE MANAGEMENT IN INDIA

With the increasing population and urbanization, the amount of garbage is on the rise. But availability and use of appropriate methods for their disposal very limited. Public and other waste generators are not aware of the hazards of unsafe disposal methods. Lack of availability of qualified professionals and lack of accountability are major lacunae in the system of solid waste management. Local bodies are vested with authority and responsibility to implement rules and the funds available for them are limited. The lack of strategic MSW plans, waste collection/segregation and a government finance regulatory framework are major barriers to achieving effective SWM in India. Attitude of the public, limited environmental awareness and lack of motivation are also major barriers in improving solid waste management in India [3].

4. FINANCIAL SUPPORTS AND INCENTIVES BY THE GOVERNMENT

Government of India is keen on “Clean India” movement through forumulation of flagship projects such as Jawaharlal Nehru National Urban Renewal Mission (JnNURM), Urban infrastructure Development Scheme for Small & Medium Towns (UIDSSMT), Swachh Bharat Mission (SBM) through financial grants and funds (Rs.20,000 crore for Panchayat and Rs.5,000 crore for Urban Local Body).

"Swachh Bharat Mission" (SBM) is a major initiative of the Ministry of Urban Development (MoUD), Government of India and ***Solid waste management is one of the important components of the Mission.*** The national government has allocated of Rs. 14,623 crore for the SBM for urban areas, of which Rs.7,366 crore is given for the SWM for five years i.e. 2014-2019[5].

Few other similar funding schemes include

- Incentives upto Rs. 5000 crore for renewable energy based MSWM
- Financial support of up to 50 percent of the capital cost to set up pilot demonstration plants on MSW composting.
- Financial assistance for waste characterization and feasibility studies.
- A minimum amount of Rs.2 crore and a maximum of Rs. 10 crore per project are available as capital subsidy to promote waste to energy projects [5,6,7].

5. POLICY INITIATIVES

Management and Handling of MSW Rules-2016: The rules have stipulated guidelines for both the waste generators and local bodies / municipal authorities separately to avoid any ambiguity in implementation of rules.

I Waste Generators

- Segregation at source: The new rule has mandated all waste generators to segregate the waste, before handing over the same to the garbage collector, into three streams for effective management such as biodegradables, Dry (Plastic, Paper, metal, Wood, etc.) and Domestic Hazardous waste diapers, napkins, mosquito repellants, cleaning agents etc.) The rule is applicable to all institutions, markets, events etc.

2 Collection and disposal of sanitary waste: Manufacturers of sanitary napkins should provide safety pouch for disposal of each napkin.

3 Collect Back scheme for packaging waste: Brand owners of various products should administer a system to collect back the non-biodegradable packaging waste.

4 Waste processing and treatment: The bulk waste generators shall install facilities to decompose the biodegradable waste and the resultant residue may be given as waste. It is advised to provide space exclusively for waste recovery / recycling in industrial estates, special economic zones and the like.

II Local Bodies / Municipal Authorities

Local authorities are responsible for creating public awareness and make necessary infrastructure available, collection, transportation, storage, processing and disposal of solid waste in their respective jurisdiction either at for segregation its own or through public private partnership mode appropriately. Local authorities should also facilitate Construction, operation and maintenance of solid waste processing facilities, Bio-methanation, microbial composting facility, vermi composting, anaerobic digestion or any other appropriate processing for bio-stabilisation of wet biodegradable wastes. Local bodies and Municipal authorities are vested with power to levy fee for collection / processing of waste from the waste generators. The authorities can also “spot fine” the waste generators for non-compliance of any of these rules. Additionally, the rule stipulates zero tolerance for mishandling the waste such as throwing, burning etc.

6. DISCUSSION

The policy initiatives of the Government on solid waste and plastic waste are well thought of. But for the rules to actually take shape and for the results, it may take 2-3 years. Responsibility of local authorities are very high and they should also be given clear-cut and straight forward instructions without ambiguity for successful implementation of the rules. Awareness programmes and training programmes for the authorities and the workers is mandatory. Massive awareness camps on solid waste hazards and their safe disposal should be arranged for waste generators (public). Identification of suitable technologies for waste conversion, site selection and lack of finance may be pivotal challenges the local authorities may encounter. With the guidance from district collector and support, private partnership may prove to be successful.

The authorities may seek help from educational institutions to develop cost effective, smart technologies to derive value from waste. The schools and technical institutions may adopt nearby villages for effective implementation of solid waste management. Technologies such as composting, vermicomposting, biomethanation etc. are well established and educational institutions may be used for effective implementation the stipulated rules.

Integration of informal sector into the formal system might have proved effective. The new rule fails to acknowledge the role played by the rag pickers and the like. Legal provisions for strict penalty against the rule violators should be enforced. Moreover, the rules should have decentralized solid waste management.

The Rules need to focus on making solid waste management a people's movement by taking the issues, concerns and management of solid waste to citizens and grass-roots.

7. SUGGESTIONS TO BETTER WASTE MANAGEMENT

If we need to meet the goal of a ‘Clean India’ by 2019 then waste management issues should be dealt with urgently. Everyone should ***Stop Thinking Waste Management- Think Sustainable Materials Management***. Strengthen the implementation of the Rules with not just defining of time frames for implementation but also goal setting defining targets to be achieved and penal provisions for failure to implement or reach the required targets. Life cycle of the product includes policy intervention, rethinking the need of product, redesigning to minimize waste and production of durable goods. The main purpose of the life-cycle of the product is to use the resources to the maximum to avoid unnecessary waste.

8. CONCLUSION

Solid waste generated outstripped the available facility to dispose them. Most of the waste generated, around 80%, are thrown into dumpyards and landfill is the only method adopted for solid waste disposal in India. Such dumpyards are storehouses of disease causing germs and mosquitoes and is a proven cause for growing health hazards. Animals / birds feed on this waste which affects their metabolism adversely. Water bodies, air, land, ground water etc. are polluted.

Increase of plastics in the municipal waste is another threat to the environment. There is no proven / established technology to effectively to dispose plastics. Incineration and burning of plastics release harmful gases which are carcinogens (dioxins). Oceans, rivers, ponds etc are overflowing with plastic discards threatening the aquatic life. There are few proven technologies for converting degradable waste to wealth / energy such as composting or biomethanation. The methods / technology should reach every household with proper training. Similarly, technology to convert plastic (LDPE) to petrol (Indian institute of petroleum,2015) and use of plastics for laying roads (Prof Rajagopalan Vasudevan, Thiagarajar College of Engineering, Madurai, 2015).

Though the governments strive to curb the waste generation and for its safe disposal, it is the individual's responsibility to follow the guidelines for a sustainable environment.

Data accessibility: No data were generated from the work, and all supporting data were obtained from previously published work available via the references below and from the output of the international conference on which the paper is based.

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COHERENT POLICIES ON CLIMATE CHANGE: ECONOMIC, ECOLOGICAL AND SOCIAL PERSPECTIVE

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ABSTRACT
For over a century, climate change has been considered as an isolated environmental problem. However, it has been understood lately that climate change is a complex economical, ecological and social challenge which requires a holistic approach for developing solutions that address all affected sectors. Decarbonising the economy; aimed at reducing the dependence on traditional fossilized fuels or natural resources to meet the demands of our industries is a major factor in combating climate change along with addressing the issue of sustainable development. Sustainability is important for current and future generations which can be achieved by building alternate and climate smart technologies. Current strategies implemented to reduce emissions like the 'Cap and Trade' or 'Carbon Tax' methods are individually incapable of achieving the desired results; hence a hybrid model is proposed which uses the benefits of both models.

Keywords: Climate change, Decarbonising the economy, climate smart technologies, sustainable development, hybrid model

10.INTRODUCTION

Climate change refers to the broad range of global climatic phenomena like extreme changes in temperatures, rising sea levels etc. that has undergone drastic changes in the post industrialization period.

Scientific research has offered convincing evidences that Global warming is actually happening and historic data of CO_2 concentrations and temperature variations across the globe have offered sufficient content to fuel a policy change in global resource utilization. Though it has been viewed as an environmental problem for decades, the realisation that it impacts other sectors demands strategic changes in the way policies are developed to combat emissions and climate change. Several sceptics have argued that global warming and climate change are a natural phenomena, however scientific evidences indicate that human generated GHG's (Green House Gas) and the rate at which they are generated is instrumental in causing disturbances to the natural replenishment cycle whereby causing high GHG concentrations and consequent changes in temperatures. Despite the fact that a handful of scientist disregard the idea that climate change is caused by anthropogenic factors, the general consensus follows that global warming is a reality and climate change is occurring at an alarming rate.

This paper also emphasizes the fact that global warming and associated climate change aspects have been viewed for a long time as an environmental problem alone. However several studies which evaluate sustainability and resource utilisation have indicated that climate change has far reaching effects on society, economy, livelihoods, quality of life, and several other sectors which were not perceived to be affected by this crisis until recently.

There is also a parallel debate that treads on the concept that the major sources that cause climate change and major sectors which get impacted by it are different. Hence it is becoming imperative to view climate change policy with a social perspective than as an isolated environmental problem.

Climate change solutions are not so much challenged by the availability of alternate and more efficient technologies as they are by incentives or policies to implement these technologies. Despite the fact that climate change and global warming are adversely impacting environment, the policies that we choose in order to offset these problems must be evaluated from a social and economic perspective as these major stakeholders have been neglected for a long time and are vastly impacted by the problem.

The current strategies implemented to build policies and the methods of mitigation which are proposed by several agencies are highly technology based and the socio-economic aspect is barely evaluated or addressed. Hence this paper aims to discuss different aspects pertaining climate change and its impact based on three major concepts which break the longstanding myth that climate change is an environmental problem alone and demand policy inclusions to address social and economic challenges arising due to it:

(i) Carbon pollution has localised impact at source location along with global effects.

(ii) Mitigation policies must be redesigned - current strategies like Cap and Trade and Carbon Taxing are insufficient in their outcomes – Hybrid systems will offer an effective holistic solution.

(iii) Sustainability and climate change – policies to encompass the wide range of Socio-economic impact of climate change.

11.PROBLEM STATEMENT

The United Nations Framework Convention on Climate Change (UNFCCC) states that "Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities."

The current climate change- its impact, mitigation, adaption measures are always written, spoken, communicated or debated emphasizing the environmental, economical or technological inputs and costs. The social dimensions of climate change are generally omitted from these discussions as a result they are not well understood or addressed. This is also one of the reasons why current policies do not include responses that can address the negative impacts on social dimensions. It also fails to take advantage in developing a number of sustainable goals from the potential opportunities provided by it.

It is clear that developing a strategy to combat climate change from an environmental perspective only is not possible therefore this paper focuses on the social dimensions of climate change from sustainable, equitable and development perspective. The aim is to derive strategies that can look at the holistic aspect of climate change which covers scientific, economic, social and environmental issues under a single framework. The final outcome of these strategies should be to enhance human welfare and provide equal access to resources that are necessary to sustain life. This paper also aims to identify options that can be explored to strengthen climate policy making process.

The underlying argument emphasizes on the need to reach a balanced global reductions in emissions while offering specific attention to the most vulnerable groups and their roles. The goals of this transition must include fulfilment of basic needs, health, human rights, equal opportunities, protection and good governance.

People are not only the victims of negative impacts of climate change; they are the drivers of climate change and the essential agents for redirecting development. With this understanding – of the central role of people, social dimensions should profoundly reshape the way in which policy-makers formulate and implement climate change policy.

12.NEW PERSPECTIVE TO THE CLIMATE CHANGE PROBLEM

A new perspective is generated by discussing the findings in three sectors which allow us to revisit the climate change problem and see it in a new light. These findings lead us to accept the wider base of climate change problem, and once acknowledged, it lets us develop strategies to counter these problems.

3.1. CO2 domes: Is the source of carbon pollution a decisive factor?

Carbon pollution and consequent climate change are arguably not in question anymore. Environmental scientists worldwide have offered collective research data that clearly indicates a shift in climate change than would be expected from natural course. Simultaneously, socio – economic scientists are also beginning to accept the fact that climate change is real and is causing enormous losses to social and economic wellbeing of humans.

In line with the findings and conclusions of various green summits and the Kyoto protocol, it is observed that carbon pollution has been widely accepted as a global phenomenon and mitigation techniques or policies are based on the concept that CO_2 concentrations are fairly similar across the globe hence the source at which carbon pollution is originating and the location at which mitigation factors are applied has been ignored. (An inference from the underlying concept of carbon trading mechanism offered as an effective measure of mitigation as per the Kyoto protocol). However, several studies undertaken in the past two decades indicate facts which are contrary to the global theory assumption. Jacobson in his work on local air pollution caused by CO_2 domes (CO_2 domes are a CO_2 cover formed above urban areas which have high CO_2 emissions and is observed worldwide in major cities and highly industrial areas) explores the fact that not enough research has gone into identifying the local impact on air pollution and resident health where CO_2 domes exist. The study notes that local temperatures, ozone levels, particulate matter and humidity levels are highly impacted by the presence of CO_2 domes. Such findings implore the consideration that climate change caused by carbon pollution should be tackled with a combination of efforts – that range from local policies to address localised pollution issues and global policies to address global issues. Currently increase in GHG concentration is studied and analysed from the global angle and policies (like the Cap & Trade) designed only aim to tackle that issue.

However, the local impact is neglected which has more intense and immediate effects. Hence, there is need for a combination of policies that can be effective in addressing both global and local issues.

3.2. Mitigation policies: Cap and Trade v/s carbon Taxing vis-a-vis proposed hybrid model

Cap and trade and carbon tax are two distinct policies aimed at reducing greenhouse gas (GHG) emissions which came into existence after global conventions on climate change like the Kyoto protocol proposed reducing carbon emissions in order to restrict global warming.

In a cap-and-trade system, there is limit or cap declared by the government on the overall level of carbon emission from an industry. This cap is reduced year after year to reach a set reduced pollution target. As the cap is decreased each year it helps to reduce industry’s carbon emissions. Industries that cannot achieve this cap and their emission levels are more than the allotted limit can trade with other industries whose emission levels are not likely to reach the cap. Cap quota is distributed by government generally through an auction. Thus, the companies will be encouraged to minimize carbon emissions so that they do not need to buy pollution quota from another company. Moreover, it may provide an incentive to companies to reduce the emissions to a level that they have surplus pollution quota which can be sold for money. Under this system the market determines the price of carbon credits. In this way, the emission cap ensures that total global GHG concentration goes down and companies are given an economic incentive to find better ways to reduce harmful greenhouse gas emissions and support clean energy.

Carbon tax imposes a price on carbon emissions. It is one of the most powerful policies that encourage companies and households to pollute less by investing in cleaner technologies and adopting greener practices. Carbon tax offers a stable carbon price whereas cap and trade provide certainty about amount of emissions reductions.

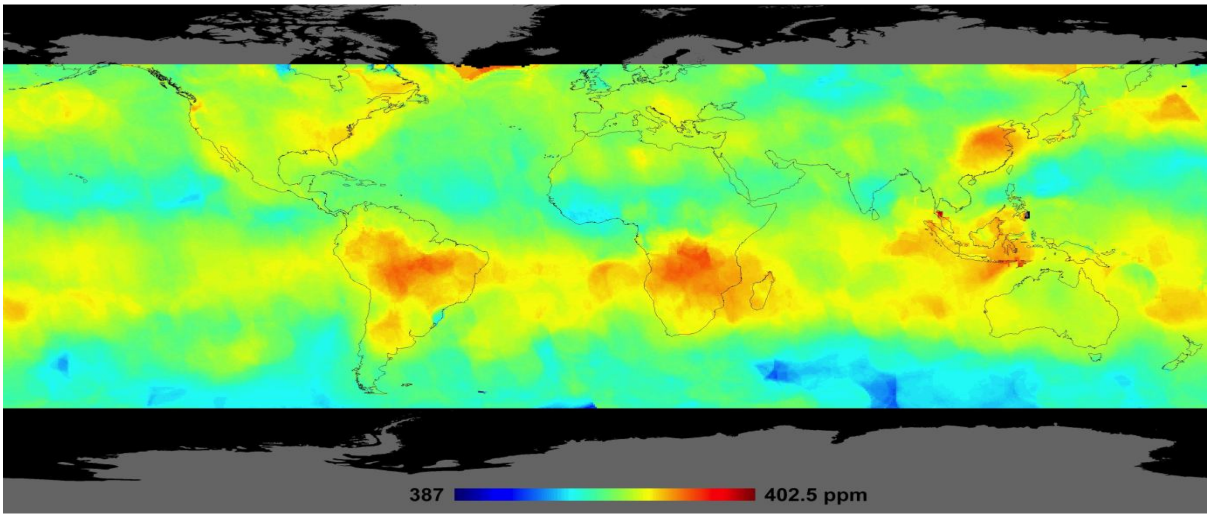

Fig-1.1: CO_2 concentrations across the globe measured by the 'Orbiting Carbon Observatory-2 satellite'. NASA

Carbon emissions have both global as well as local impact (as observed in fig 1.1). These carbon emissions not only raise global temperatures but also alter local weather patterns, increase sea levels, cause changes in growth pattern of agricultural crops, affects human health, etc. There are some cities which have higher concentration of CO_2 gases thus the impact of CO_2 on such cities will be higher compared to other parts of the world.

Considering the existing strategies, Cap and trade concept provides a response to the global challenges faced by these emissions. Companies that are responsible for emitting greenhouse gases which leads to a rise in temperature globally are forced to reduce their emission levels as per the quota provided to them. This can help counter global climate issues however local problems caused due to these emissions are not addressed. Carbon taxing on the other hand allows governments to generate funds from companies that emit carbon in the atmosphere. These funds can be used to develop technology that can help reduce or minimise the impact of these emissions. Thus, it is observed that neither of the concepts delivers a total solution to the existing climate change problem which is spanned across global and local effects.

3.3. Sustainability and Climate change: Social, Ecological and Environmental impact.

As discussed within this paper, carbon pollution has been looked upon as a global and not localised pollutant unlike most other air pollutants and its corresponding impacts on the local region has been ignored whereby the policies developed to mitigate its impact and enhance sustainable development highly disregard its’ effect on local population and economy. Taking the reference of certain sinking islands which form a part of the Solomon

Islands in the Pacific; rise in sea levels due to global warming is causing the sea to consume parts of the island (also applicable to coastal states) and displacing its population. If this trend follows a new category of climate change refugees will be flooding towards the inland cities causing heavy burden on their infrastructure and resources. Thus, it is unarguably concluded that sustainable policies and enhancing resilience are the most important factors which demand that current approaches of climate change adaptation or mitigation be revisited.

The concept of sustainability draws its meaning from the context in which it is used. The generic English term 'sustainability' ordinarily refers to 'the ability to be maintained at a certain rate or level'. (Oxford English Dictionary 2011. Oxford: Oxford University Press [Google Scholar]). However, when used in intellectual discourse while referring to economic aspects it is largely understood as the capability to respond or recover from stresses or shocks that cause economic instability. Apart from this, sustainability has also acquired a new definition ever since ecological imbalances were evident from over utilisation of resources. The new definition states that 'sustainability is development or resource utilization that allows us to meet the needs of the present generation without jeopardising the ability of the future generations to meet their needs.' Drawing from the above definitions it can be summarized that sustainability and climate change policies must ensure that adaptation should be proposed in a manner that allows low sensitivity to livelihoods of societies affected, practical implementation of alternatives offered and efforts to build resilience within the affected communities to deal with climate change more effectively. Such an approach will ensure that all concerned sectors like economy, ecology and society become support pillars of the impending change.

Touching upon the economic impact of climate change, the Stern review on the Economics of climate change, estimates that the cost of being ignorant to climate change is expected to be about an annual loss of 5% of global GDP. If we think in terms of a cascade effect involving a spectrum of interrelated aspects of the economy, the losses could be as high as 20%. In addition to this situation, if humankind continues to grow industrially at the current rate without incorporating efficient or alternate technologies then resource availability will continually reduce leading to exponential rise in prices of essential commodities.

4. CONCLUSION

Climate change policies are traditionally designed and adapted from a global perspective which is only partially competent to deal with the whole crisis. The revelation from scientific study that the source location of pollution has high relevance defeats the concept underlying emissions trading as it fails to recognise the location of pollutant generation and offset. The local impact of climate change which is experienced in a shorter time span must be addressed effectively by adopting hybrid policy pattern wherein countries as a whole can set their targets and cities that are looming under the threat of CO_2 domes can develop their independent policies to tackle short term issues. It is further suggested that since current strategies of Cap and Trade mechanism or Carbon taxing are individually incapacitated in terms of policy to handle the holistic problem of carbon pollution; a hybrid model must be adopted wherein large geographies can adopt the 'Cap and Trade' mechanism allowing overall reduction in atmospheric GHG concentration whilst smaller geographies can adopt 'Carbon Tax' mechanism such that the fixed revenue collected by means of tax can be utilised in adopting pure technological alternative practices that improve local stress absorbency and increase resilience. Apart from the policy to reduce emissions, urgent attention is required to address sustainable development in the wake of climate change. Climate change is disrupting productivity and the world population is continually increasing and thus is increasing the demand on resources. At the ongoing rate of consumption even the current generation won't be able to cover its needs. Hence the findings' urge the need for developing and implementing climate smart technologies.

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A STUDY OF SATISFACTION LEVEL OF THE EMPLOYEES OF AIR INDIA AFTER JOINING STAR ALLIANCE

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ABSTRACT
This paper talks about the problems faced by the Air India employees and the satisfaction level of the Air India employees. This research also provides the insight of the problem and give suggestions to overcome the problem. This study explains the impact of how unsatisfied employees can play a vital role in the performance of the company.

Keywords: Air India, Employees Satisfaction and Star Alliance

1. INDTRODUCTION

1.1. Introduction to Air India

Air India is the flag carrier airline of India. It is the third largest domestic airline in India in terms of passengers carried, after IndiGo and Jet Airways with a market share of 13% as of May 2017.

It is owned by Air India Limited, a Government of India enterprise, and operates a fleet of Airbus and Boeing aircraft serving 90 domestic and international destinations. It has headquartered in New Delhi.

Air India has its main hub at Indira Gandhi International Airport, New Delhi and a secondary hub at Chhatrapati Shivaji Maharaj International Airport, Mumbai.

Air India became the 27th member of Star Alliance on 11 July 2014.

1.2. Introduction to Star Alliance

Five airlines created Star Alliance as the first global aviation alliance back in 1997. We're still pioneering – dedicated to innovation and excellent customer service, with a track record of success. So, the customers experience the best of both worlds: absolute reliability coupled with constant innovation.

Today, Star Alliance has 28-member airlines, each with its own distinctive culture and style of service. Alliance members come together to offer smooth connections across a vast global network. A project company based in Frankfurt, Germany, coordinates Star Alliance activities. These include co-locations at airports, infrastructure, communication initiatives and other services to improve your travel experience.

2. REVIEW OF LITERATURE

- **Steer Davies Gleave for the European Commission, (2015)**, "Study on employment and working conditions in air transport and airports"- In the research they pointed out that because of low cost airlines the employees were made to work more which resulted in fatigue of the pilots and the crew which can be very much dangerous for the passenger life.
- **Chang and Keller (2002)** argue that quality in airline service is difficult to describe and measure due to its heterogeneity, intangibility, and inseparability, and only the customer can truly define service quality in the airline industry.

3. RESEARCH METHODOLOGY

3.1. Purpose of the Research

Air India employs 24,100 employees whereas Indigo Airlines and Jet Airways employs 12,362 and 13,945 employees respectively.

Air India operates 90 destinations with 149 Aircrafts it has a market share of 13% as on May 2017 where has Indigo Airlines operates with 46 destinations with138 Aircrafts and has market share of 41.2% as on May 2017.

3.2. Objectives of the Research

- To understand the satisfaction level of Air India employees
- To know the reason of poor performance of the employees

3.3. Methods of Data Collection

Primary data was collected through google form from Air India employees.

3.4. Research Design

The research design deployed was exploratory research design. It is descriptive in nature.

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3.5. Delimitations of the Research
The research is conducted on 25 Air India employees in Mumbai

3.6. Limitations of the Research
The research have physical and economical constraint.

3.7. Data Analysis Methods
Data is collected from Air India employees to generalize the findings and draw conclusions of the research study.

4. FINDINGS

- 40% of the employees are not satisfied with the salary which the company is providing on the other hand 40 % of the employees are happy with their salary.
- Majority employees working inside the airport feels that environment is good but employees who are working in cargo or on tarmac area feel their working environment is not proper.
- Only permanent employees feel that they have job security and all the employees on contractual basis have no job security as their contract ends in 3yrs or 5yrs needs to be renewed which depends on the company.
- Approximately 60% of the employees are not satisfied with the welfare facilities provided by the company in terms of canteen, transportation and accommodation.
- 80% employees are not happy with the promotion, transfer and rewards policies which the company implement.
- Majority of the employees are not encouraged or motivated in the company.
- 70% of the employees feel that the distribution of operational is not satisfactory in Air India.
- 36% of the respondence were not satisfied with the Pre-training to the inexperience staff.
- 84% of the employees does not like the hygiene which is maintain in canteen.
- Majority of the respondence feel that the managers do not have leadership quality and the top-level managers are not able to make good strategies to face the competition.

5. CONCLUSION

Air India should employees are not satisfied with the policies and the rules regulation, this have a negative impact on the employee’s performance. If the employees are not satisfied their will not work for the betterment of the company and will not take initiative to solve any problem which occurs. Airlines been a service sector industry, which means services given by the employees play a key role in the customer satisfaction. In Air India the employee’s satisfaction level is low which means their performance and the services given by the employees will be not as good as other airlines, this could be the reason for low market share. Air India also have more employees, but their efficiency is low as compared to Indigo and Jet Airways.

6. RECOMMENDATIONS

- Company should give fare salary according to the performance and ability of the employees
- Working environment have a positive impact on the employees, company should provide proper working environment to the employees working in cargo and tarmac area as employees working inside the terminal building will have good working environment as it is Mumbai International Airport.
- Job security is also important for a worker, so company should take some decision to give job security to the contractual employees.
- Air India should improve the welfare facilities and should maintain proper hygiene in the canteen and take quarterly feedback from the employees and suggestion to improve.
- Transfer and promotion policies should be strictly on the performance of the employees and should not have any personal biasness.
- Managers should encourage and motivate the employees which will increase the employee’s moral.
- Government should depute expert and experience personnel from the airlines industry at the top-level management, which will help them to understand the process and prepare strategies.

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A STUDY OF THE IMPACT OF NSS ON YOUTH EMPOWERMENT & DEVELOPMENT

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ABSTRACT
India is a country swarming with youth. In the field of youth development programs, "empowerment" is used interchangeably with youth engagement, leadership, civic participation and self-efficacy. Today, empowering youth is one of the major concerns. Empowering youth is important as it motivates them to be self-reliant. Youth empowerment is not only for development of financial prosperity but for individual growth & social changes as well. This study is focused on the NSS scheme which was introduced by the central government in the year 1969. Through focus group interviews the data was collected regarding how they became empowered through their involvement with NSS unit. This research paper tries to find out the effectiveness of the scheme in youth empowerment and their development. Data was collected through primary & secondary data. A sample size of 80 students is chosen for interpretation & analysis. This paper tries to provide suggestions too for more effectiveness based on the responses collected.

Keywords: Youth, Empowerment, NSS & development

1. INTRODUCTION

India is the home to 17.5% of the world population. Indian youth must be prepared not just for domestic market but also for the international markets. Government of India on its part have taken various initiative for youth empowerment & skill development. To name few of the scheme:

a. Pradhan Mantri Jan-Dhan Yojana (PMJDY)

b. Mudra bank yojana

c. Kisan vikas patra

d. Digital India

e. Amrut- Atal mission for rejuvenation and urban development

f. NSS

All the above mentioned schemed are launched to enable youth to acquire such knowledge, skills and techniques which will help them in their personal and social growth as well as foster in them sensitivity towards problems in the society. The aspiration of the youth is high with a great past & greater promise for the future. Thus, the need is to create increasing opportunity for them for their development & for empowering them.

❖ **Youth Empowerment**

The word 'empowerment is giving power. Empowerment is a multi-level construct consisting of practical approaches and applications, social action processes, and individual and collective outcomes. In the broadest sense, empowerment refers to individuals, families, organizations, and communities gaining control and mastery, within the social, economic, and political contexts of their lives, in order to improve equity and quality of life (Rappaport, 1984; Rappaport, 1987; Zimmerman, 2000). India is one of the youngest nations in the world, 65% of population being under 35 years of age. Empowering the youth is important because it will help the youth to get the right educational infrastructure so that they can developed the skills and get adequate opportunities to get employed. Youth is a period of transformation when immaturity is replaced by maturity thus freedom should be given to them so that they can grow & develop to the full potential

The United Nations Human Settlements Program (UNCHS-Habitat) defines youth empowerment as "the circumstances and factors which enhance the development of citizenship and productiveness among young people as they move into adulthood. It is concerned with the adaptation of government structures and institutions to protect and deliver children's, youths‟ and human rights, including the right to participation".

❖ **Youth empowerment through NSS**

The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. The University grant Commission, headed by S. Radhakrishnan recommended the introduction of the NSS in academic institute.

The sole aim of NSS is to provide hands on experience to the young students in community services & also to take part in various government led community service activities & programmes. The three pillars of the NSS

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programme are - Central government, the States/UTs and the Educational Institutions. National Service Scheme (NSS) was introduced with the primary objective of developing the personality and character of the student youth through voluntary community service. Its helps the student to establish a link between campus & community, knowledge and action. NSS provides an opportunity to early adolescent to engage themselves in the social or civic issues prevailing in their neighbourhoods.

The NSS & Rajiv Gandhi national institute of youth Development they are retained as separate scheme due to distinctive nature. Other schemes for youth empowerment are merged into a new umbrella scheme called ‘ Rashtriya Yuva Sashaktikaran karyakram (RYSK).

- **The Motto**

The motto or watchword of the National Service Scheme is ‘NOT ME BUT YOU’ this reflects the essence of democratic living and upholds the need for selfless service and appreciation of the other person’s point of view and also to show consideration for fellow human beings.

The main motto of the NSS is to develop the develop and to uphold the personal growth of the students through involvement in community.

- **The symbol**

The symbol of the NSS based on the "Rath Wheel" of the Konark Sun Temple of Orissa. It Signifies progressive cycle of life, continuity and social change.

2. SIGNIFICANCE OF THE STUDY

India is poised to be the next Super Power. The biggest asset for India is the youth. Unless & until we focus on the youth and empower them the goal of being the Super Power will not be achieved. NSS is a medium through youth empowerment can be achieved. NSS helps in grooming the youth and a major role in the 360 degree personality development. This research paper is to study the impact of NSS on youth empowerment & development as it is relevant in the current scenario.

3. OBJECTIVES

1. To study the various Government schemes for youth empowerment.
2. To study the NSS scheme.
3. To study the impact of NSS scheme on youth empowerment
4. To study the change in behaviour of youth due to NSS

4. RESEARCH METHODOLOGY

Research Design

(1) Explanatory & Descriptive Research: The current research is explanatory in nature as it tries to find cause and effect relationship between NSS & youth empowerment.

(3) Data Collection

Survey method & Interview method is used to collect data from the respondents through questionnaire.

Google form was created - Link: https://bit.ly/2EPNyih

Secondary data is collected through books, journals and web sites.

(3) Sample

Convenient sampling technique was to be adopted to collect the sample size of 80 respondents.

5. Summary of findings

1. Age Group

Below 21	6 9%
1 – 25	1 5%
Above 25	1 6%

2. Family Background

Lower Middle income group	69%
Middle Income group	5%
Higher Middle Income group	6%

3. School Background

English Medium	70%
Vernacular	30%

4. Are you aware about various government Schemes for youth?

Yes	39%
No	26%
May Be	35%

5. Are you aware about NSS?

Yes	95%
No	5%

6. How many camps have you attended?

None	16%
1-3	73%
More than 3	11%

7. Did NSS have any impact on _____?

Leadership	8%
Confidence	15%
Team Work	6%
All	56%
Others	1%

8. Are you satisfied with what you are contributing to society through NSS?

Yes	83%
No	5%
May Be	13%

9. Do you think NSS will help you in getting a job?

Yes	48%
No	1%
May Be	51%

10. Any major changes in your behaviour post being NSS Member?

Yes	88%
No	12%

6. INTERPRETATION

From the above data we can interpret that

- 69% of the students joining NSS are from the lower income group
- 35% of the students are not sure whether they are aware about the different governmental schemes for youth Development & 26% of the population are not aware about the schemes
- 95% of the population are aware about the NSS scheme
- 73% of the population have attended 1 - 3 camps
- 56% of population feel that NSS had impacted them in positive manner – helped them in developing leadership qualities, boost confidence & encourage them in teamwork
- Approx. 50% of the population feels that NSS will help them in getting job
- 88% of the population feels that NSS has brought about major changes in their behaviour such as time management, become extrovert, be proactive, helped them to become team player, community first then self, survive under any situation etc.

7. CONCLUSION

The NSS tries to bridge the gap between the content and the method of education on the one hand and tries to meet the needs and aspirations of the community, specially the weaker sections on the other. The NSS volunteer learns various management skills such as leadership, communication skills, change management, knowledge management, time management, listening skills, organization skills etc. it has also helped students to impart various values like caring, warmth, forgiveness, creativity etc. Giving back to the community through selfless service is a true sign of a developed nation. Through youth empowerment India will surely become the next “Super Power”.

8. SUGGESTIONS

1. NSS to be adopted by all the Colleges voluntarily.
2. Students to be encouraged to be a part of NSS by creating awareness of the scheme.
3. Through various activities NSS students should be inculcated with various virtues & value system.
4. The values of NSS to be adopted not only in letter but in its true spirit.
5. Today Indian student community is without direction and ideology (Altbach, 1971; Choudhury, 1989) and requires credible youth movement. NSS provides them with social apprenticeship
6. For the better conceptualization of the scheme permanent & dedicated PO should be appointed.
7. It must be a coordinated and cooperative effort from the government, academia and the industry regarding designing the framework of the policy & implementing them.

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A STUDY ON AWARENESS OF AYUSHMAN BHARAT YOJANA AMONG THE HARD HAT WORKERS IN MUMBAI CITY ZONE

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ABSTRACT
Government of India has taken initiative to protect the poor and vulnerable session of the society through Ayushman Bharat Yojana. This paper provides an insight of the Yojana which is very much required by the hard hat workers as their life is at risk at work. This study provides the information regarding the awareness of Ayushman Bharat Yojana among the Hard Hat workers in Mumbai City Zone, as there are many development projects going on in Mumbai city and Mumbai city is the financial capital of the India.

Keywords: Hard Hat Workers, Ayushman Bharat Yojana, Mediclaim Policy

1.1. INDTRODUCTION

Ayushman Bharat Yojana or ***Pradhan Mantri Jan Arogya Yojana*** **(PMJAY)** or **National Health Protection Scheme** is a centrally sponsored scheme launched in 2018, under the Ayushman Bharat Mission of MoHFW for a New India -2022. The scheme aims at making interventions in primary, secondary and tertiary care systems, covering both preventive and pro-motive health, to address healthcare holistically. It is an umbrella of two major health initiatives namely, Health and Wellness centres and National Health Protection Scheme(NHPS).Indu Bhushan has been appointed as the Chief Executive Officer (CEO) and Dr Dinesh Arora as the deputy CEO of Ayushman Bharat Yojana Ayushman Bharat comprises of two noteworthy components.

1. National Health Protection Scheme

Ayushman Bharat-National Health Protection Scheme, which will cover more than 10 crore poor and vulnerable families (around 50 crore recipients) giving inclusion up to 5 lakh rupees for every family every year for secondary and tertiary consideration hospitalization.

Advantages of the scheme are portable the nation over and a recipient secured under the scheme will be permitted to take cashless advantages from any open or private impaneled doctor's facilities the nation over.

It will be a privilege put together scheme with qualification chose with respect to the premise of hardship criteria in the SECC database. It will focus about 10.74 crore poor, denied country families and recognized word related classification of urban specialists' families according to the most recent Socio-Economic Caste Census (SECC) information covering both provincial and urban.

One of the center standards of Ayushman Bharat - National Health Protection Mission is to co-agent federalism and adaptability to states.

For giving strategy bearings and cultivating coordination among Center and States, it is proposed to set up Ayushman Bharat National Health Protection Mission Council (AB-NHPMC) at peak level Chaired by Union Health and Family Welfare Minister. States would need State Health Agency (SHA) to execute the scheme.

Covering practically all optional and numerous tertiary hospitalizations. (but a negative rundown)

2. Wellness centres

Rs 1200 crore allotted for 1.5 lakh health and wellbeing centres, under this 1.5 lakh focuses will be setup to give exhaustive health care, including to non-communicable diseases and maternal and child health services, aside from free fundamental medications and indicative services. The administration will redesign existing Public Health Centers to Wellness Centers. The welfare scheme has been taken off on August 15, 2018. Further, Contribution of private part through CSR and humanitarian establishments in embracing these focuses is additionally visualized. The rundown of Services to be given at Health and Wellness Center include:

- Pregnancy care and maternal health services
- Neonatal and infant health services
- Child health
- Chronic communicable diseases
- Non-communicable diseases

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- Management of mental illness
- Dental care
- Geriatric care Emergency medicine

Progress of Ayushman Bharat Yojana 26 states and union territories accepted the scheme except three viz. Delhi, Odisha and Telangana. More than a lakh people have taken benefit of the scheme till October 2018.By 26th November more than 825,000 e-cards had been generated and there was a push to recruit more private hospitals to the scheme. Three had already been signed up: Cygnus Sonia Hospital in Nangloi, Dr. Shroff's Charity Eye Hospital and Cygnus MLS Super-Speciality Hospital

2. REVIEW OF LITERATURE

Sonal Kala and Dr. Premila Jain (2015) Health Insurance is a piece of "Individual Insurance and General Insurance". The therapeutic protection or Mediclaim strategy is extremely outstanding in India. There are bunches of organizations which have been offering the shabby Mediclaim strategies in India. The historical backdrop of health protection in India follows back to 1923 when the Workman's Compensation Act‟ was passed. The year 1948 saw the presentation of ESI Act. From that point forward, the health protection advertise has been a wild boondocks with standards always advancing Indian Health Insurance covers medicinal treatment, if there should be an occurrence of illness and mishaps. Get great medicinal care without stressing over costly treatment. In a tight sense would be an individual or a gathering buying health care inclusion ahead of time by paying a charge called premium. Health protection is extremely entrenched in numerous nations. However, in India it is another idea aside from the sorted-out part representatives. In India just about, 2 percent of aggregate health use is subsidized by public/social health protection while 18 percent is financed by government spending plan. This examination centered upon the consciousness of health protection among layman in Rajasthan Area (India) This investigation likewise gives recommendations to health insurance companies to deal with their limitations and to grab the opportunities more in the market.

K. Selva Kumar and Dr. S. Vijay Kumar (2013) in their article, "Mentality of arrangement holders toward organization of general insurance agencies with introduction to Madurai district" The investigation uncovers that 23% strategy holders have a place with low dimension of frame of mind, 46% to medium dimension of mentality and 31% to abnormal state of demeanor. There is an essential relationship between ages, sex, instruction, and conjugal status, sort of family, network and dimension of their mentality set out toward organization of services of public segment general insurance agencies holds great.

R. Amsaveni and S. Gomathi (2013) made an endeavor to discover Mediclaim arrangement holder fulfillment, to perceive the purpose behind leaning toward Mediclaim arrangement to safe monitor themselves and avoid future hazard, greater part of the respondents have taken individual scheme to representatives. The serious issues looked by the respondents are absence of auspicious correspondence and constrained rundown of doctor's facilities secured by the health protection suppliers**.**

J. Jaypradha (2012) in the article, "Issues and prospects of health protection in India" featured that the health protection division in India has enrolled 30% development rate in 2008- 09. The entrance of health protection in India had ascended to 4.8%, in 2008 from 1.2% in 1999-2000. The normal medicinal use of an Indian family is 6.7% of the yearly pay.

Ravikant Sharma (2011) in his paper, "A Comparison of Health Insurance Segment-India versus China" tries to think about both the economies India and China on health protection perspective. The two economies have colossal capability of health protection and 45% of world's populace lives in both the nations.

P. Jain et al., (2010) in his paper, "Issues looked by the Health Insurance Policyholders of Diverse Public and Private Health Insurance Companies for Settlements of their Claims" Measure the issue looked by clients. The goals were to consider purpose behind refusal of guarantee, fulfillment dimension of client and issues looked by them in getting their case.

Ramesh Bhat and Falan Reuben (2001) in their article, "Examination of case and repayments made under Mediclaim strategy of general protection enterprise of India" examinations 621 cases and repayments information identifying with arrangement starting year 1997-98 and 1998-99 of Ahmadabad. They found that number of approaches and premium gathered have become 30% amid 1998-00 and half amid 1999-2000.

R. P. Ellis et al., (2000) in the article, "Health protection in India-Prognosis and Prospects" attempts to survey an assortment of health protection framework in India, their constraint and job of the general protection company as an imperative protection agency. They centered the requirement for an aggressive condition. This paper prescribes enhancement in conveyance of health care and its financing, effective working of the ESIS and CGHS and revising the Mediclaim framework and modification in prohibition proviso.

3. RESEARCH METHODOLOGY

3.1. Purpose of the Research

The purpose of this research paper is to understand the awareness of the Ayushman Bharat Yojana among the hard hat workers as their lives are at a risk while they are working at the construction site. Government have taken the initiative to protect poor people and to give them good medical facilities.

3.3. Objectives of the Research

- To know the awareness of Ayushman Bharat Yojana among Hard Hat Workers.
- To know Hard Hat Workers interest for availing mediclaim policy.

3.4. Methods of Data Collection

Primary data was collected by respondence though questionnaire. Secondary data was collected through various websites.

3.5. Research Design

The research design deployed was exploratory research design. It was descriptive in nature.

3.6. Delimitations of the Research

The research is conducted in Mumbai city zone by filing questionnaire from 20 respondence.

3.7. Limitations of the Research

The respondence hesitate to fill the questionnaire, language problem, workers are illiterate, physical and economical constraint faced by the researcher.

3.8. Data Analysis Methods

Data is collected by the Hard Hat workers working at construction sites and from various websites to generalize the findings and draw conclusions of the research study.

4. FINDINGS OF THE RESEARCH

- In the research we have find out that no hard hate workers have availed for any kind of the medical or health insurance
- About 75% of the respondence are interested in availing Mediclaim policy, as all the works were aware that their job is a very risky.
- Employer of the hard hat workers do pay the hospitals bill if any injury is caused on the working site only, but other health problems or illness is not covered by the employer.
- All workers were interested in availing Ayushman Bharat Yojana
- Hard hat workers are also ready to pay premium to avail Ayushman Bharat Yojana

5. CONCLUSION

Hard hat workers are mostly illiterate, the workers hardly know anything known as health insurance. They are aware about the prevailing risk in their job. Hard hat workers also save some amount from their wages for treatment expenses in future. Government have taken a good initiative to protect the poor and vulnerable group of people through Ayushman Bharat Yojana. The problem faced by the government scheme is awareness and communicating the scheme to the mass. Advertisement of the scheme is there on Television, Newspaper and Radio but the impact of these advertisement is not positive on the actual population as they don’t watch television or listen to radio neither they read newspaper.

6. SUGGESTIONS

- Spreading the awareness to the Hard Hat Workers through proper channel, like internet as during the survey it was observed that all the Hard Hat workers were listening songs and watching videos on YouTube.
- Information of Ayushman Bharat Yojana should the communicated to the managers of the construction sites.
- Language is also a barrier as they cannot understand English. Advertisement should be made in the regional language which is understood by them covering all the rules and regulations.

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A STUDY ON BUDDING ENTREPRENEURIAL MIND-SET

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ABSTRACT
In a world where ideas drive economies, innovation and entrepreneurship are often seen as inseparable. The governments around the world are starting to realize that in order to sustain progress and improve a country's economy, the people have to be encouraged and trained to think out-of-the-box and be constantly developing innovative products and services. Entrepreneurship, along with Entrepreneurial Skills, are n perceived as one of the most desired in today`s world. This is not only important for business success but also to be successful in the corporate. This has become a mantra for programs and initiatives that aim to prepare young minds for the future. One such method for entrepreneurship education is Design Thinking. The characteristics of such Entrepreneurial Design Thinking can enhance entrepreneurship education by supporting respective action fields of entrepreneurial learning. This paper is an attempt to an exploratory study using secondary data of such mind sets.

Keywords: Entrepreneurship, Entrepreneurship Styles, Design Thinking, Innovation

1. INTRODUCTION
The origin of the basic word "entrepreneurship" is from a French word "Entree" which means "To enter" and "Prendre" which means "to take" and in general sense applies to any person starting a new project or trying a new opportunity. Initially in the early sixteenth century it was associated with those who were engaged in military expeditions. In the seventeenth century it was extended to cover civil engineering activities such as construction and fortification. Since then the term entrepreneur has been used in various ways (Larson, 2000).

Entrepreneurs are key players in any developing country particularly in terms of their contribution to economic development. Entrepreneurship has been recognized as an important source of economic growth. They create new jobs for themselves and others and also provide society with different solutions to management, organization and business problems. Entrepreneurship can make a particularly strong contribution to the economic well-being of the family and communities, poverty reduction and women's empowerment, thus contributing to the Millennium Development Goals (MDGs). Thus, governments across the world as well as various development organizations are actively undertaking the promotion of entrepreneurs through various schemes, incentives and promotional measures.

Entrepreneurship is innovation, following the instincts, and pushing it beyond known limits and making it work. It is therefore not surprising that business schools world-wide are increasingly modulating courses and programmed to facilitate their students to an alternative to the classical corporate executive career, instilling entrepreneurial principles and business fundamentals in youth of all personalities and backgrounds. Still, entrepreneurship and more so entrepreneurship education are relatively juvenile fields of study, dating from the 1950s (Schumpeter, 1953), but the concept of entrepreneurship education has been reaching significant dimensions from the early 1980s on and contemporarily. Over 1600 entrepreneurs programmed were developed worldwide by the year 2000 (Katz, 2003) and the number is increasingly continuously.

The entrepreneurial mind-set is the inclination towards discovering, evaluating and exploiting the various opportunities available into the market. McGrath and MacMillan (2000) have elaborated the concept of entrepreneurial mind-set in their book titled "The Entrepreneurial Mind-Set". They have elaborated the concept of habitual entrepreneur, which means starting businesses both within existing organization and as an independent venture. They further elaborated that one should utilize the entrepreneurial ways of thinking frequently so that it becomes habit of our mind-set. But on the other hand, changing the habit of mind-set, it's very difficult. But it's not impossible, it requires practice so that it becomes habit.

Entrepreneurial process is not only for start-ups, it's a comparative mind-set that will teach you to identify, assess, shape and act on opportunities in a variety of contexts, settings and organizations.

2. LITERATURE REVIEW
Campbell (1992) asserts that entrepreneurship is the result of a decision that occurs when the expected returns from becoming an entrepreneur is compared to the cost-risk evaluation and return from potential wage labor. While economists acknowledge the role that psychological, sociological and cultural factors play the major

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factors of the economic model per se dominate the economist's entrepreneurial definition. People who display strong independent characteristic often have difficulty in working the role of employee. This emphasis on individual responsibility for outcomes leads to a related aspect of the entrepreneurial personality: the need for achievements has been attributed to entrepreneurship although empirical evidence to support this contention is inconclusive (Brockhaus, 1982).

Entrepreneurial venture has the potential to prompt innovations and to sustain an innovation system. In engaging in new economic activities entrepreneurs re-organize them in innovative and valuable way (Schumpter, 1934).

During the last three decades, many countries of the world have experienced the need of entrepreneurship development as means of solving the problem of unemployment and industrialization. The need for a broad based entrepreneurial call in India arises from the need to speed up the process of activating the factors of production, leading to a higher rate of economic growth, dispersal of economic activities, development of tribal and backward areas, creation of employment, opportunities, improvement of standard of living of the weaker sections of the society and involvement of all sections in the process of growth (Das, 2012).

Entrepreneurship plays a vital role in the growth of an economy. Entrepreneurship development has been accepted as one of the strategies to achieve the objective of promotion of entrepreneurship for solving the problem of unemployment and rapid industrialization (Mali, 2000). Successful entrepreneur is someone who aims to act independently and in accordance with this purpose, he carries the risks. It is impossible for an entrepreneur to be trapped in strict bureaucracy and they are capable of resisting against rules or forcing to change rules in order to reach their aims. They are skilled at acting independently. Entrepreneurs are people who make a difference compared to others (Kuratko & Hodgetts, 1998)

3. OBJECTIVES OF THE STUDY

The main objectives of the study are as follows

1. To study and understand the Budding Entrepreneurial Mind-set.
2. To study different Entrepreneurial Styles and its applicability in design Thinking

4. DATA AND METHODOLOGY OF THE STUDY

The major objective of this study was to understand the Budding Entrepreneurial Mind-set. It also study different Entrepreneurial Styles along with its applicability in Design Thinking. The data is purely based on secondary data collected through literature review. For secondary data relevant books, journals, magazines, internet, newspaper have been used. All facts, opinions and problems discussed are assessment of the corresponding authors.

5. THEREOTICAL FRAMEWORK

5.1 Entrepreneurship Styles leading to Entrepreneurial Mind-set

Carol Dewwk, a renowned Stanford university psychologist has defined a mind-set as "a simple idea that makes al, the differences in his book "Mind-set: the new psychology of success (2006)". In his book he has divided the mind-set into two fixed and growth mind-set. While a fixed mind-set means your talents, intelligence and abilities are just fixed and growth mind-set means the abilities, intelligence and talents can be developed.

From academic point of view, the mind-set concepts comes from cognitive psychology and organization theory. Intentional awareness, our experiences and what we are helps to shape our mind set. Second concept is "being Entrepreneur", which means who understands or have ability to take major projects. In 1942, Joseph Schumpter, emphasises on the various new elements of entrepreneurship such as innovations, process and services with regards to entrepreneurial mind-set.

There are 5 different entrepreneurial style. They are as follows

1. **Maker:** Makers bring ideas to life through tangible plans. A maker sees the big picture and the smallest details, simplifies complex problems, their strength lies in execution. They are great at getting things done. Makers prefer processes and systems over people, and apply their organizational skills across fields. The core desire lies in maker is to solve problems efficiently. The major strength lies in makers are, they are much disciplined, organized, goal oriented and master planner. On the other hand they do have weaknesses such as they would not like to give up control, they can be dominating and aggressive and may have low emotional quotient. The famous example to understand this style is the Henry Ford, founder of Ford. He revolutionary's production and manufacturing, thereby making automobiles accessible to masses.

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2. **Magician:** the magician dreams of what can be. They tries to forecast thing, with some innovative ideas. They takes risks that aren't always calculated, navigates uncharted territory, and stays ahead of the market. Magicians are the ones creating future, surprising their customers and competitors. These are visionaries and rule breakers who ask- "why not". They think widely and imaginatively. Steve Jobs, founder of Apple and Pixar, is a very good example of visionary and radical entrepreneur. He is best known for his design and perfection.

3. **Merchant:** Merchants are often on the lookout for the next big thing. They quickly spot a market opportunity, an unmet need, and identify how to match demand with supply. They often improvise on existing ideas, and innovatively apply concepts from other industries. The core desire is to capitalize on opportunities. The strength lies with them are decisive, persuasive and improviser. They are very good at spotting the opportunities. They are resourceful, rational and tactful. Merchants tactfully decide and act quickly to persuade others to come on board. Richard Branson, founder of Virgin group is one of the well-known entrepreneurs, who has made a mark in everything from music to space tourism.

4. **Mobilizer**: Mobilizers are the connecting thread. They connect ideas, people and resources and are great at building relationships and high energy teams. They are often involved at the grass root level and tend to focus on large scale social problems and act as catalysts to bring about systemic change. The main qualities of mobilizers is to be empathetic and compassionate. Their core priority lies with the people and are known for social change.

5. **Master:** They are experts in their own right. Master individuals are highly skilled and knowledgeable with a great passion for their work or field. They adhere to high quality standards and except the same of others. An expert is often looked up to as a role model, thought leader, or influencer in their industry. They have high standards for excellence. Bill gates, founder of Microsoft and Gates foundation, revolutionalised the software industry by introducing the windows OS. He is also a great leader and a highly influential philanthropist.

5.2 Design Thinking

The term 'design' has been associated always with an aesthetics of products and visual manifestations and, in industries it relates to the products design – such as fashion, interior and architectural design. But now a days we relate design to the ability to resolve complex issues, also commonly referred to as "wicked problems" (Buchanan, 1992). The literature available on design thinking is frequently described as associated to this concept of design.

The growing uses of this concept have resulted in a need for a way to classify the different categories of design presentations. In 2001, the Danish Design Centre developed the design ladder. It has been used for illustrating the variation in companies' use of design.

Figure-1: The Design Ladder which are used in organizations

At the first level, there are non-design companies, which rarely use design or design has no role in the organization at all. At the second level, design is used for styling and aesthetic purposes in the various organization. These companies are usually product oriented or manufacturing companies. At the third level, where design itself is integrated in the organization's processes. On the highest level, design is a strategy and part of the management. ("Design Ladder," n.d.). The debate of design thinking has been mostly linked with the design activities on the top, at level 3, design as a process and level 4, design as a strategy. Carlgren (2013) focuses on design as an innovation, as well as design as processes and strategy. The design ladder model as discussed above is useful for understanding the differences between the different ideas of design and inspecting how design thinking is related to design.

Design thinking is appealed to be an innovative and creative approach for establishments to achieve a competitive advantage through developed offerings and customer understandings, or transforming a firm into a vigorous and flexible entity (Acklin, 2010). But, rising concerns about design thinking have arisen, from both consultants and research scholars. In discussions of design thinking, the term has been claimed to be uncertain

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and too nonconcrete. Others have mentioned that the word is simply used for marketing drives by well-known design consultancies. Johansson-Sköldberg et al. (2013) propose that attempting to produce a definition might not yield value or further use. This is a decent point as a too price the definition might limit the concept of design thinking. Like Carlgren, Rauth and Elmquist puts it “there is a need for some kind of shared understanding to enable systematic research on the phenomenon” (Carlgren, Elmquist, & Rauth, 2012). To understand the issue of the vague definition of design thinking, the literature has moved from prescriptive studies to descriptive studies, with more emphasis on exploring how design thinking is used in practice (Carlgren, Rauth and Elmquist, 2014, Schmiedgen, Rhinow, Köppen and Meinel, 2015).

Table-1: The framework for design thinking by Hassi and laksso, (2011)

Dimension	Description	Characteristics
Practices	Refers to concrete activities, ways of working and the use of specific tools	• Visualizing • Thinking by doing – e.g. prototyping • Human centered approach – putting people first • Collaborative work-style • Combination of divergent and convergent approaches
Thinking style	Refers to mentality, cognitive processes and thinking style	• Abductive reasoning – „the logic of what might be“ • Reflective reframing • Holistic view – 360° understanding of the problem • Integrative thinking – bringing competing constraints into harmonious balance
Mindsets	Refers to mental orientations towards the work	• Experimental and explorative – willingness to risk failure • Ambiguity tolerant – acceptance of a „liquid and open“ problem-solving process • Optimistic – unwillingness to give in to constraints and obstacles

Various theories as discussed above are based on research and applications of large organizations, despite the fact that design thinking is supposed as a comprehensive approach that can be used and practically can be applied in organizations of all sizes (Schmiedgen, Rhinow, Köppen, & Meinel, 2015).

An extensive literature review yielded limited academic research on this topic. However, there has been debate that relates to design thinking in budding orginisations and its uses in anentrepreneurial context. Nielsen and Christensen(2014)recommend that design connected with “wicked problems” are meticulously related to entrepreneurship, due to the similarities between reasoning used in both and design and entrepreneurship. Research of entrepreneurship used to conceive entrepreneurship as a causal process. But recently, a new body of research suggests that entrepreneurship uses a logic that can be described as a creative problem-solving approach (Sarasvathy & Forster, 2012). This perspective aligns with design thinking, which is explorative, rather than predetermined; as opposed to causal logic, the focus is on the creation of opportunities. Entrepreneurs thus become designers (Sarasvathy & Forster, 2012).

Nielsen & Christensen points out that there are distinctive differences too (2014) Design has strong focus the front end where ideas are explored and created whereas entrepreneurship are mainly interested processes that transforms ideas into opportunities.

5.3 Entrepreneurship and growth

In 1990’s and 1990’s have seen a review of the role of small and medium firms and consideration for entrepreneurship. Understanding the role of entrepreneurship in the process of economic growth requires the decomposition of the concept of entrepreneurship.

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According to Audretsch et al., there is significant impact of entrepreneurship to economic growth lies in its serving as an intermediate for an information that might otherwise have stayed un-commercialized. Empirical evidence on the relationship between entrepreneurship and economic growth is contradictory. According to Van Stel et al., states that entrepreneurship has a positive correlation with GDP growth in developed countries, its association with growth in under developed countries is negative. In another study, Baumol declares that projects entrepreneurship can act as a substitute means of stimulating growth 'that may hold greater appeal for today's policy makers and global leaders'.

According to Jiang et al.survey, the authors discovered that an upsurge in the number of entrepreneurs generates a growth-improving variety effect and that diminished overall quality of entrepreneurial ability undermines economic growth. Galindoa and Mendez, examine whether feedback effects exist among entrepreneurship, economic growth and innovation employing data from thirteen industrialized nations. They determine proof in support of feedback: economic activity supports entrepreneurship and innovation activities.

It seems there is some mist of doubt surrounding the implication of entrepreneurship to economic growth in industrialized countries. This happens because of, in most industrialized countries financial growth is not Government influence as the significant determinant of economic growth. Li et al.looks at the impact of entrepreneurship on economic growth with a data set from twenty-nine countryside in China over twenty years; their conclusions display that entrepreneurship positively affects economic growth

6. CONCLUSION

Entrepreneurship has levered the growth of any economy. Entrepreneurship development is the key factor to fight against unemployment, poverty, and prepare ourselves for the globalization. Entrepreneurial activity does not result in economic impacts alone. There are important social and cultural impacts of entrepreneurial activity. These impacts can affect the narrower business environment or industry, as well as the wider natural, social and cultural environments. Given entrepreneurship's potential to support economic growth, it is the policy goal of many governments to develop a culture of entrepreneurial thinking leading to entrepreneurial mind-set. It promotes capital formation and creates wealth in country. Entrepreneurs have been identified as a "major force for innovation and Job creation" and therefore much research about Entrepreneurship Styles has concentrated on their motivation to become entrepreneurs. Entrepreneurial Leadership is a mandate for all firms, small and big to survive and flourish. Researchers today are delving into the various elements that impact Entrepreneurial Styles. A better understanding of the elements that comprise this concept is of vital importance in understanding and developing the concept itself. Design Thinking is the tool kit for Innovation. Thinking like a designer can transform the way companies develop products/services, strategies, and processes. This can bring about what is desirable along with technologically feasible and economically viable to transform the businesses.

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SLDS: DO WE NEED TO TAKE A FURTHER STEP?

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ABSTRACT
In past few years awareness about SLD (Specific Learning Disabilities) has increased considerably in the Academic World. As per recent research nearly 13% of students (School or College) are likely to have SLD. As a result of awareness abroad and in India, Honorable, Court has also studied the issues of SLD and given certain positive guidelines to help and benefit students with SLDs. Honorable court, guidelines are being translated in to practice through Government Rules and circulars at School and University levels.

However looking at the policies somehow one gets the feel that, the entire focus of the system is on passing these students. However students with SLD are many a times bright, having above average IQ. Through this paper an attempt is made to suggest a few remedial steps to help SLD students – to cope up with educational system and also to excel in their endeavour.

If more educationally conducive and emotionally nurturing climate is provided to Students with SLDs then they can actually contribute towards society and Nation Building. How, more rational yet conducive policy changes can be introduced in this respect needs to be studied, explored and experimented meticulously under the umbrella of Special Positive Remedial Programme.

Keywords: SLDs Government, Policies, Positive Remedial programme, Special Education.

INTRODUCTION
In past few years awareness about SLD (Specific Learning Disabilities) has increased considerably in the Academic World. As per recent research nearly 13% of students (School or College) are likely to have SLD. SLD is a kind developmental disability which needs to be defined, and understood properly. Though, it is often clubbed with other Developmental Disorders, it is essentially different from other Developmental Disorders. Before suggesting any special remedial programme for students with SLDs, it is necessary to have proper conceptual understanding of SLDs. Hence, it is necessary to study for definitions and conceptual framework of SLDs.

DEFINITION OF SLD
Diagnostic and Statistical Manual– IV Definition
The definition of Learning Disability as per the Diagnostic and Statistical Manual – IV (DSM-IV) (American Psychiatric Association, 1994):

Learning Disorders are diagnosed when the individual's achievement on individually administered, standardized tests in reading, mathematics or written expression is substantially below that expected for age, schooling and level of intelligence. The learning problems significantly interfere with academic achievement or activities of daily living.

Learning disorders are of four types: Disorders of Reading, Disorders of Mathematics, Disorders of written expression and Learning disorder not otherwise specified (NOS) (American Psychiatric Association, 1994).

Dyslexia
The general term for reading disability which involves difficulty in phonetic mapping, where sufferers have difficulty with matching various orthographic representations to specific sounds.

Some claim that dyslexia involves a difficulty with sequential ordering such that a person can see a combination of letters but not perceive them in the correct order. (F81.1/315.2)

Dysphasia/Aphasia - Speech and language disorders

- Difficulty producing speech sounds (articulation disorder)
- Difficulty putting ideas into spoken form (expressive disorder)
- Difficulty perceiving or understanding what other people say (receptive disorder). (F81.0/315.02)

Dysgraphia
The general term for a disability in physical writing, usually linked to problems with visual-motor integration or fine motor skills. (F81.2-3/315.1)

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Dyscalculia
The general term for disability in mathematics. (American Psychiatric Association, 1994).

The ICD -101999 has also defined the concept of SLDs

Conceptual Understanding
From the authentic scientific definition of SLD, it becomes clear that, children with average or even above average IQ are likely to suffer from this disorder. In other words, in spite of containing good intellectual / cognitive ability, children with SL Disorder are not able to perform academically either in one or in more than one subjects or areas. Naturally the frustration faced by these children, their parents and sometimes by their teachers is of different kind. Medical practitioners often apply the metaphor of a perfectly made machine, to explain the LD. That is to say, seemingly there is no fault in the Nervous System and yet the machine is not fully functioning.

LD are basically neurobiological disabilities which involve cognitive processes and impair learning, resulting in poor academic performance. LDs occur irrespective of various factors such as child's culture, race, socio economic status, language gender and so on. LDs sometimes co-occur with disorders like ADHD, moreover sometimes some other psychological, behavioural difficulties emerge as a kind of side impact of LD. To quote. "For example, individuals with LD

Also may manifest social Emotional, behavioural, or attentional Difficulties, which may be either

Con -Comitant or secondary to LD"
Moreover, most students with LD possess uneven pattern of subtle cognitive strengths and weaknesses that affect overall process of learning and comprehension. SLDs need to be addressed from varied angles. Robust Research body rooted in various disciplines as varied as education, Psychology, phonetics, speech – Language Pathology, Neurology, medicine and others needs to be erected, in order to deal with this peculiar disorder.

Objective of the research paper
The present research is essentially aimed at understanding the policy and suggesting a few pathways to deal with LD especially in case of college students. This humble attempt is rooted in cognitive understanding of policies and my practise in the field of "Teenage Counselling".

Thus, the research is qualitative in style and its main objective is to suggest a few explored solutions which can help youngsters to cope up with this disorder as well as to find the mechanisms by which we may help students with SLDs to contribute to society and towards Nation Building. This is specially so because highly gifted children may also have LD. Their talents need to be tapped and channelized.

To quote "Individuals identified as intellectually gifted may also have LD".

The Indian grass-root level Scenario about SLDs
In India fortunately the disorder was recognised understood first in the medical field then in the Academic, psychological legal and ultimately in the educational field. Thanks to certain proactive parents, pediatricians, Judiciary, Psychiatrists and sensitive, citizens. This journey of awareness took place during 1990s in India. Due to petitions of parents and research of medical practitioners LD was recognised in the academic field and policies got carved in the light of newly dawned realization about this disorder. Today at least in metropolis and education of hubs of India, there is on increasing awareness about LDs both in the pure Academic world and Non Academic World. However unfortunately, besides vague awareness about the disorder, there is not much positive to be said about this. There is so much obscurity and confusion about various significant issues related with SLDs for exam. There is hardly any official data and research about prevalence of LDs or general public is looking at SLDs as a typical medical or psychiatric condition. The multilingual scenario in India is adding to the difficulties of children. The proper diagnosis and educational consideration has started very slowly in India during 1990s, hence the 1st generation who reaped the fruits of policy is now in colleges UG and in post PG Graduation, courses. However, unfortunately, we are absolutely clueless, as far as, how teenagers with SLDs are to be nurtured. There is hardly any exploration experimentation in this area. Parents of children with SLDs are ok till school level. They get baffled and feel helpless when higher educational and career decisions are to be made.

Medico Therapeutic Mode of Intervention
The most basic step in this case is obviously detection or timely diagnosis of SLDs. Early diagnosis and well planned interventions help children to cope up with the situation as well as to develop some compensatory learning mechanisms on their own. Once again the issue is little complicated as far as diagnosis and detection of

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SLDs is concerned. There have been serious controversies among thinkers, as far as identification strategies are concerned.

To quote "The relative merits of different methods of LD identification have been the subject of particularly heated controversy".

One standard method which is generally adopted across the world and in India is to conduct of students Psycho educational test batteries. However the latest mode of diagnostic intervention in this respect abroad is RTI. i.e. Response to Intervention, at early stage of learning.

But in India, the nature of diagnostic intervention is purely medico therapeutic in nature. In Mumbai the child Psychiatrist wards alone are entrusted with power to do the diagnosis. After authentic diagnosis children with SLDs are accommodated in the mainstream of education.

General Policy about SLDs at grass root education level

Since the year 1995, 2005, till 2016 many petitions have been filed in the court of Law by parents of children with SLDs and by a few spirited whistle blowers in our society. As a results of which major policy changes are brought at Government level, school level, which are also being extended to college and University level.

The highlights of this policy changes are listed below.

1. Proper diagnosis by Medical and Psychology personnel only on the Recommendation of school Principal Authentic by Municipal Hospitals alone
2. Authentic Certification about child's specific learning disorder
3. Inclusion of SLDs in main stream or All Inclusive Educational Policy of India.
4. Various recommendations or concession given to students with SLDs as far as examination and their appraisal on the basis of examination is concerned.
5. Continuation of same concessions at undergraduate and Post Graduate level.

As per Maharashtra Government School Education and Sports Department Government Resolution This circular address needs of special children, of all types. University of Mumbai has brought out a circular based on the same guidelines.

This circular, clearly brings out sensitivity of the education system towards such delicate educational issues. Not only that but it also speaks about commitment towards. 'All Inclusive Education': Whether such policies are designed by every state in India, or whether they are designed by the other Nations of the world, is a matter of serious research. So, it is needless to say that Maharashtra Government has indeed shown pro-activeness and concern for education and positive political will, in dealing with the issues of SLDs. This policy in a way infuses with larger Social Democratic spirit of our Nation.

Passive Intervention Approach

With all praise for general policy of Government and the larger society, which represents, the passive and exclusively medical approach towards SLDs, is leading to certain difficulties at the level of human dynamics. Moreover looking at the peculiar attitude of certain students (with SLDs) and their parents, one is induced to look into the policies and their impact.

As mentioned in the GR and circular, SLDs are clubbed together with all other physical and neurological difficulties. for example slow learning, autism, hearing impairment, visual impairment and so on.

The concessions revolve around mainly examination and assessment. Extra time to write, extra marks to pass, writer for writing the examination, in certain cases oral exams – is what is specified by the policy. To put it in a nutshell, the GR and University directives are centred on concessions diluting performance expectations to such an extent that 'learning' is becoming senseless.

Parents are so obsessed with scholastic performance that somehow they are loose the sight of the purpose of this whole exercise of called education.

As a counsellor and teacher, i have come across the cases where children with SLDs, some low start, taking the painstaking learning process for granted. How this extra marks on paper, really helps them in life is a very serious issue of concern and an urgent concern for research as well.

One more point, in this regard is by the time children reach college education two things are evident. That is

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1. Children have crossed puberty and entered teenage
2. If have been guided properly at school level they have inherently developed certain coping mechanisms for their studies.

So, the concessions which are quite meaningful at earlier stage of learning may not prove to be so useful and necessary during teenage.

Moreover teenage brings with it, yet another bundle or baggage of some, advantages and disadvantages, in the realm of Personality Development.

What can be the further step?

Concessions as far as exams are concerned are of course one basic necessary condition for relatively smooth academic experience of children with SLDs. But Teachers, Parents, Judiciary, the larger society and of course students need to look at it in a more pro active manner. The reasons for this appeal are

1. Education is not to be equated only with Academics. It encompasses entire life. The most fundamental aim of any educational process, is to make the person self sufficient. So is applicable to students with SLDs.
2. Human brain, in spite of much good Research remains a mystery. The subtle neurobio-chemical processes underlying ‘Learning Experience’ are not completely known to us. In case of SLDs this fact is even more true.

Most students with SLD have an uneven pattern of Strengths and weakness that affect Learning...... The problems experienced by these students vary in severity and pervasiveness; some students experience deficit in one area of functioning and others experience difficulties in multiple areas of functioning regardless students with LD require instruction and support that are differentiated in ways that address their specific learning needs.

The quotation vehemently brings out need to work on students on ‘one to one’ basis.

3. Teenage is often regarded as age of emotional storm. The biggest strength of this developmental stage is children’ capacity to change SLDs being neuro biological and a permanent (That is what the latest research indicates) disability no change is possible in the learning deficiencies being faced by a child. But supportive counselling programme can definitely help students to unravel their hidden strengths or talent.

These three factors speak enough about why we need to look at SLDs in different way and need to mend the policy for the sake of affected students development as well as to use their strengths for the society.

Example

In my practise of counselling with college students, we could render supportive counselling programme for a few youngsters truth SLDs. One most prominent example is being narrated over here

- Jeevan (name changed) could successfully compete his formal degree with the help of time and marks concessions, (He refused to take the writer, after counselling and special coaching) could complete his examination with more confidence.

  More significant was his growth as a short film director and enhancement of his camera skills.

  Seeing Jeevan’s growth in Non-academic area and his coping in Academics was a pleasurable experience.

  In fact detailed discussion of the counselling programme executed for these children is an independent topic of Research article. Nevertheless, it is being mentioned over here just to support the argument about how we need to construct more effective mechanisms at institutions to help students to cope up.

Special Positive Remedial Programme (SPRP).

- The most basic requirement at college levels is the appointment of counsellors and preferably special educators in every Higher Education Institution

SWOC Analysis of Students with SLDs

As being mentioned over here again and again SLDs is very complex learning condition. It many a times found existing amongst children with average or even children with gifted IQ. The package of personality characteristics is also with it.

A proper Psychometric Assessment deciphering Strengths, Weaknesses, Opportunities and Challenges (SWOC) of these children needs to be conducted meticulously in this case.

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- **Seeking Parental Support**

Pro active parental support is extremely necessary. The support group of parents can definitely help the institution and children to grow. The details about the role of parents need to be spelled out by respective Institution for effective functioning of the group.

- **Academics**

Special Remedial Coaching can be induced to help students, especially to attain conceptual understanding and ‘Higher level Comprehension’ of specific subjects.

- **Exams**

As at school level, there in a special authority to authentify the certificate of LD and children’s concessions there has to be a parallel authority may be at college and University level, which can certify the specific concessions and specific educational programmes / projects to be undertaken by the specific students. Moreover, in case of Exams, certain innovations may be introduced as

- Different question paper with MCQs
- Certain marks for Viva
- Unique projects in the subject to be completed and so on.

Of course all this is possible only through ‘One to One’ work and proper certification.

- **Continuous Educational Programmes for Teachers. To quote**

“Interventions are many, but none can equal good teaching practices”

Capacity building of Teachers is one most input aspect of this programme. This can happen through various, short term a certificate and diploma courses.

- **Vocational Training**

The National Skills Qualifications Framework (NSQF) initiative by UGC RUSA initiatives are actually supportive to the development of children with learning deficiencies.

CONCLUSION

We may conclude with most relevant guidelines given by NJCLD.

- Policies must apply not only to early childhood education and K-12 but also to other aspects of individuals’ lives. Supports should continue into higher education, employment, and across the life span, supports also must ensure that individuals with LD are provided with access to high quality instruction, intervention, accommodations, and modifications that enable them to participate in and benefit from education, work, recreation, and other opportunities available to individuals without disabilities.
- Policies must promote effective pre-service education and ongoing professional development for individuals who provide services to persons with LD. Teachers, administrators, related service professionals, and educational specialists must be able to use evidence-based practices competently. Effective practice must be implemented in ways that are sensitive to individual characteristics and educational contexts (e.g. social, cultural, linguistic and social-emotional).

All this needs to be done WHY? Bill Gates changed the world contributed tremendously to U.S.A as well as to the world at large. Bill Gates is a person with Learning Difficulties. We do not obviously want to loose on any such talent which is hidden behind the label of SLDs, in India.

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LEADERSHIP AND ITS FUNCTION IN DEVELOPING PSYCHOLOGICAL CONNECT

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ABSTRACT
Currently the organizations are in the phase of transition economy characterized by liberalization, macroeconomic stabilization, restructuring & privatization, legal & institutional reforms and resultant privatization, price liberalization, trade & foreign exchange, competition policy, infrastructure reform and many more. Essentials to survive this change include better technology, better infrastructure and better people with effective communication. Leadership plays a major role in developing people with effective communication (Yukl, 2010).

This paper focuses on important leadership function of "giving feedback" utilized by leader to build psychological connect with the employees. The way a leader interacts with the employees draws upon and promotes psychological connect and sets a culture (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) especially during formal and informal feedback session and can serve as a responsible and effective leadership model able to build credibility and improve productivity (Avolio et al, 2004). The structure of the paper is as follows: introduction to the topic succeeded by a brief literature review that deals with the main constructs. Next the research methodology used is explained followed by the research results and findings, limitation and scope of future research. The paper contributes to the leadership literature by considering how effective leadership behavior focused on feedback given to employees may impact employee contractual status with regard to relational psychological connect, and ultimately competitiveness of the organization, in a dynamic, turbulent and challenging environment. The focus is on organized service sector organizations.

Keywords: Leadership, turbulent environment, feedback, productivity, effective communication

1. INTRODUCTION

The way a particular leader has the potential to influence the behavior of his/her members, is a relatively invisible and often neglected feature of a firm's HR system. Leaders can directly communicate what efforts are needed on the part of employees and what they can expect in return. Leadership is known to influence business strategy implementation, long – term firm performance, and financial success through their mere ability of motivating and engaging the behaviors of their team in the right direction (Conway et.al, 2009). By virtue of what leaders pay consideration to, measure, and control, they exert huge command over how employees set clear goals, direct their efforts and how well they perform at work.

Currently the organizations are in the phase of transition economy characterized by liberalization, macroeconomic stabilization, restructuring & privatization, legal & institutional reforms and resultant privatization, price liberalization, trade & foreign exchange, competition policy, infrastructure reform and many more. Essentials to survive this change include better technology, better infrastructure and better people with effective communication. Leadership plays a major role in developing people with effective communication (Yukl, 2010).

This paper focuses on important leadership function of "giving feedback" utilized by leader to build psychological connect with the employees. The way a leader interacts with the employees draws upon and promotes psychological connect and sets a culture (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008) especially during formal and informal feedback session and can serve as a responsible and effective leadership model able to build credibility and improve productivity (Avolio et al, 2004). The structure of the paper is as follows: introduction to the topic succeeded by a brief literature review that deals with the main constructs. Next the research methodology used is explained followed by the research results and findings, limitation and scope of future research. The paper contributes to the leadership literature by considering how effective leadership behavior focused on feedback given to employees may impact employee contractual status with regard to relational psychological connect, and ultimately competitiveness of the organization, in a dynamic, turbulent and challenging environment.

2. LITERATURE REVIEW

The purpose of this section is to present an overview of the research streams under investigation in this research paper. The areas of leadership, goal setting, performance and psychological connect are discussed in the context of service sector.

Leadership

Individuals produce valuable results, when they feel good about themselves, the organization and the other people with whom they work. Individuals who work under a leader initially look at leadership style as a source of wisdom and then decide their pattern of working style in the organization (Ulrich et.al, 2007; Coyle et.al, 2000).

Leadership styles refer to patterns of actions that influential people use to shape others behavior. The transactional style is a set of leader behaviors that give structure to the work and job requirements employees need to accomplish (Battisti et.al, 2007). The role is to advance, clarify, and support suitable work methods and results. As a result, transactional leaders set specific, measurable goals; use mechanisms such as direction and task organizing to clarify appropriate employee behavior and make it easier to demonstrate consistently; coordinate the work individuals do; and monitor their accomplishments and deliverables (Parzefall et.al, 2010). This style derives from each efficacy from using the leader's power to reward employees. This leadership style is also known as task oriented leadership style.

On the other hand, transformational leadership style also sometimes referred as people oriented leadership style takes into consideration employee growth also along with the organizational profitability (Wellin, M., 2007)

Transactional leadership style or tough leaders may result the organizations to win in short term but will lose talented individuals in the long run. Transformational leadership style or nice leaders may win individuals sometimes at the cost of organizational profit. Thus both styles are partially effective (McDermott et.al, 2013; Michie et.al, 2005).

Effective leaders or leadership style can include use of clear, concise goal setting and feedback on the achievement of goals to communicate overall vision and instill work with meaning and to provide coordination, direction, and structure for individuals or groups of employees. Effective leaders are the ones who "manage themselves and the people they work with so that both the organization and the people profit from their presence (Kenneth & Spenser).

Leadership behavior, feedback and psychological connect

The psychological contract refers to an individual's (e.g. employee's) beliefs regarding mutual commitments between that person and in this context, the leader. These commitments take many forms, from loyalty and job security to no obligations whatsoever (Battisti et.al, 2007; Adelman, 1989). Two core types of obligations are prevalent economic or monetary psychological contract terms and relational or socio emotional ones (Morris et.al, 1997). This paper deals with relational or socio emotional ones.

These monetary obligations involve compensation for specific forms of labor, as expressed by "a fair day's work for a fair day's pay." Where money is the dominant concern, psychological contracts tend to be explicit in their terms.

The relational psychological contract is a fascinating subject because it offers so many different perspectives. It's not just a tool or a process. It helps to understand more about the 'give and take' at a basic level between leader and followers of an organization that describes working for an organization, and more specifically leading an organization (Parzefall et.al, 2010, Brown et.al, 1995).

This research paper makes an attempt to contribute to the leadership literature by considering how effective leadership behavior focused on feedback given to employees may impact employee contractual status with regard to relational psychological connect, and ultimately competitiveness of the organization, in a dynamic, turbulent and challenging environment (Shuck et. al, 2011)

3. RESEARCH METHODOLOGY

The research method used is qualitative (Kohari, 1990). The primary data is collected by means of observations and discussions with various HR and owners of organized service sector organizations. Secondary data is collected by means of published and unpublished paper and electronic sources (Saunders, 2012).

4. FINDINGS AND DISCUSSION

Understanding why employees are 'difficult to motivate', or 'difficult to manage' is the challenge of the relational psychological contract. The relational psychological contract helps leaders understand better how to align their people's needs with those of the organization, which at best is a very abstract idea. Following practices with regards to goal setting and feedback interaction between leader and follower in the organization can initiate the building of constructive relational psychological contract (Kenneth & Spenser; Hughes et.al, 2010):

Goal setting

Clarity of Key areas of responsibility

It is essential for the leader to clear the responsibilities and accountabilities of the staff. Generally, a leader must understand that 80% of really important results will come from 20% of the goals. Focusing on these 20% of goals can enable follower to be clear of their key areas of responsibility, maybe three to six goals in all. Of course, in the event a special project comes up, separate goal setting session can be held by the leader with the followers. This philosophy will lead to 'no surprises' culture as everyone knows what is expected from the beginning itself.

Empower individuals to solve their own problems

Leaders can enable the individuals to solve their own problems by guiding them how to follow the process. If the followers are taught to put the problem in behavioral terms and bridge gap what is actually happening and what they desire to be happening, check for solutions and implement the right one as per availability of resources, empowerment of followers can result.

Feedback

Clear, consistent and immediate feedback

Crystal clear consistent feedback has to be given to the followers immediately. Clarity in exactly what the individual did right or wrong reflects sincerity and familiarity with what the individual's work. Immediate feedback on behaviors leads to immediate corrective actions on the part of the followers instead of piling up of all the feedback for performance appraisal session (Shuck et. al, 2011; Wellin, M., 2007)

Positive Feedback - Praising

Leaders should tell people up front that they are going to let them know how they are doing. Praise people immediately. Tell people what they did right—be specific. Tell people how good you feel about what they did right, and how it helps the organization and the other people who work there. Stop for a moment of silence to let them "feel" how good you feel. Encourage them to do more of the same. Shake hands or touch people in a way that makes it clear that you support their success in the organization.

Negative feedback - Warning

Warning should be given as soon as the subordinate have done something wrong. Leader can specify exactly what went wrong. Tell people how they felt about what they did wrong—and in no uncertain terms. Stop for a few seconds of uncomfortable silence to let them feel how a leader feels. Shake hands, or touch them in a way that they know the leader is honestly on their side. The leader must make it clear that he is upset of the performance and not about the individual and realize that when the reprimand is over, it's over.

5. RECOMMENDATION

Effective leaders are the ones who "manage themselves and the people they work with so that both the organization and the people profit from their presence." (Kenneth & Spenser; Del Campo, 2007)

To develop leaders who are effective leaders following recommendations are given by research with support from the literature available on leadership:

Spend time on training individuals to become leaders

Most companies spend 50% to 70% of their money on employees' salaries. And yet they spend less than 1% of their budget to train their employees to become leaders. Promotions are generally based to higher positions on basis of individual performances. Most companies, in fact, spend more time and money on maintaining their buildings and equipment than they do on maintaining and developing leaders.

Normal-distribution-curve mentality

In order to look good as a leader in most organizations, focus of leaders is to catch some of their team mates doing things wrong. It is normal mentality of most of the leaders that in an organization there should be a few winners, a few losers, and everyone else somewhere in the middle. This mentality is known as normal-distribution-curve mentality. Organizations must generate leaders with a thought process that

"Everyone Is a Potential Winner Some People Being Disguised as Losers, Don't Let Their Appearances Fool You"

Clarity of Communication

Most leaders know what they want their team mates to do. They just don't bother to tell their team mates in a way they would understand (Coyle et.al, 2000). They assume they should know. Leaders' communication should be clear and concise with focus on praising in front of all and reprimand in isolation for mutual benefit of followers and organization.

6. LIMITATION OF RESEARCH

The findings of this research paper should be viewed with carefulness due to the following limitations. The current study is limited by lack of quantitative data and confidentiality with respect to names of HR and owners of the firms. Also generalization to other sectors has to be done with caution as this study at present is restricted to organized service sector.

7. SCOPE OF FUTURE RESEARCH

Leadership development has become a topic of interest for researchers across a range of disciplines, and the diversity of theories and research emerging on leadership development is stimulating leading to new and exciting ideas on the topic especially in the field of relational and collective leadership, self-identity of leader, effect of intrinsic motivation on leadership development and many more (DeRue, 2011; Mostovicz et.al, 2009; Daft, 2008). This research focuses on developing effective leadership to play a significant role in generating relational psychological contract with the employees and further research can be conducted to see the impact of the same on the profitability index of the organization.

8. CONCLUSION

The nature of Human resource management in India is known to be 'context specific' (Brewster, 1999). Khatri *et al*. (2001) argue that the Human resource management system varies from country to county and can either be universal or context specific, like in India's case where there is a strong relationship between the social contacts and human resource management practices like stress management, work life balance, leadership etc. which presents the context-specific nature of such a practice .Most of the research on leadership has emphasized the effects of leadership rather than the development of leadership. Leadership development also emphasizes on developing people's motivation to lead, their identity as leaders, as well as their mental mode about what it means to contribute in a leadership process. Developing effective leadership plays a significant role in generating relational psychological contract with the employees and further research can be conducted to see the impact of the same on the profitability index of the organization.

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THE STUDY ON EMOTIONAL INTELLIGENCE AND LEADERSHIP STYLES AMONG MANAGEMENT EMPLOYEES

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ABSTRACT
Leadership styles may be of relevance to in a variety of situations where there is a requirement to manage others. The main objectives of the study is to analyse the relationship between Emotional Intelligence factors and leadership of Employees. Convenience sampling was also used to determine the sample size for the Employees. A total of 60 employees are taken as sample for this study. The study makes use of statistical techniques such as Percentage analysis, Chi Square test, T-test, Anova and Correlation in analyzing the data for finding the result. The study revealed that delegating leadership is adopted by a very few respondents. Leadership is very much important in every organisation. When there is a good leadership then the performance of the employees will also be good.

Keywords: Leadership styles, Emotional Intelligence, Employees

INTRODUCTION
Today's industries in India are carried in an excellent manner. Under the previous five year plans, the industrial organizations have achieved greater success both in private sectors.' Leadership style' plays an important role in shaping the behavior and attitudes of the members of an organization. In recent years, the study of leadership has drawn more attention to its role in the failure or success of an organization. Many studies have focused on investigating the role of leadership in developed countries. However, little is known about the leadership styles in developing world organization. This research will attempts to enhance the understanding of the different emerging leadership styles in organization of a developing economy.

The successful leaders of any organisation perform tasks and act in a way that provides followers with satisfaction and fulfillment in performing the work required and reaching the objectives. A leader triggers "Will to do" shows the way and guides group members towards goal accomplishment. As a writer astute only observed "where there is no vision, the people perish leaders give vision, he people perish" Leaders give vision to their followers and leading is a necessary ingredient of successful management.

Leadership style plays an important role in shaping the behavior and attitudes of the members of an organization. In recent years, the study of leadership has drawn more attention to its role in the failure or success of an organization. Many studies have focused on investigating the role of leadership in developing countries. However, little is known about the leadership styles in developing world organization. This research will attempt to enhance the understanding of the different emerging leadership styles in organization of a developing economy.

STATEMENT OF THE PROBLEM
Having a satisfied work force is very much essential for smooth working of every organization. Hence this study is conducted to know whether the workers are satisfied with the leadership qualities, communication, decision making, goal setting, training, motivation of the company. Industrial world today offers many unprecedented and yet challenging opportunities for growth. Leaders are therefore called to rethink traditional ways and play a greater and innovative role to face them with foresight and courage. There is also an urgent need to focus on the personality of leaders so that their skills and talents are robust enough to keep pace with modern times. Effective leaders can anticipate problems and quickly respond to new realities. Leadership roles today are challenging particularly because we live in a knowledge economy and operate in the era of knowledge workers. Leadership success in this context will depend on how the leader mobilizes his people to achieve extraordinary results. While other resources such as machine, material, etc.

The study will help the management to recognize the importance of Emotional Intelligence to develop effective leaders to lead the organization. The research study will benefit the executives to enhance the Emotional Intelligence competencies where they are at low levels and enable them to become effective leaders.

SCOPE OF THE STUDY
Leadership is one of the main springs of efficient human activity. The study of leadership has drawn more attention due to its role in the failure or success of an organization. It is essential to maintain and improve the efficiency, quality of output and involvement among the workers. The present study on leadership style

undertaken is to analyse and understand the various aspects connected with managing an organisation. As such it is one of the small contributions to the field of industrial psychology. Leadership style is derived by many inter-related factors. Although these factors can never be isolated from one another for analysis they can be made use for statistical techniques and be separated enough to give an indication of their relative importance of leadership.

OBJECTIVE OF THE STUDY

- To study socio-economic characteristics of the employees.
- To find out levels of Emotional Intelligence among the Employees.
- To study the leadership styles and leadership effectiveness of the Employees.
- To analyse the relationship between Emotional Intelligence factors and leadership of Employees.
- To suggest methods for enhancing emotional intelligence and leadership effectiveness.

RESEARCH DESIGN

The study is descriptive in nature. Because it describes opinion, the Emotional Intelligence and Leadership Styles among Management Employees. Sample size of the study is 60 and convenient Sampling Method is adopted to collect data. Chi Square, Anova and T-test used to analysis the data.

LIMITATIONS OF THE STUDY

- Time constraint was the biggest limitation. The project had to be completed within 4 months and hence the sample size had to be lesser.
- 60 respondent's samples cannot be generalized to the entire universe.
- As the topic for the study is wide in nature of all the matters regarding the study could not analyzed and taken into account.
- Since there is no response from whole size of sample, there may not have the accuracy in it.

REVIEW OF LITERATURE

Ali Amur AL Marhoobi and Tarik Attan (2017), "The Effects of Perceived Leadership Style on Employee Motivation: A Comparative study between Public and Private Sectors in Oman", explores the relationship between leadership style and employee motivation in the public and private sectors in Oman. The reqired data for the study have been collected through issue of questionnaire. A sample of 661 employees has been collected by adopting random sampling technique. Tools like Descriptive statistics, means and standard deviations have been used to analyze the data. The find that they participants were aware of the need for an effective leadership style that harmonises with the employees motivation dimensions. **Kashif Rathore, Chaudhry Abdul Khaliq and Nauman Aslam (2017),** "The Influence of Leadership Styles on Employees Performance under Perceptions of Organizational Politics: A Study of Telecom Sector in Pakistan", to investigate the relationship of leadership styles and employee performance. The data for the study have been collected through issue of questionnaire. A sample of 249 employees have selected by convenience and incidental sampling method. Tools like Correlation Analysis, Regression Analysis and Mediation Analysis have been used to analyse the data. They find that there is no significant relationship between the transformational leadership and employee performance. **Muskan Khan and Dr. D.S Yadav (2015),** "Impact of Leadership Style on Employee Engagement in Context of Education Sector, Specifically Business Management Institutes", to analyze Leadership as a major factor of Employee engagement. The data required for the study have been collected through issue of questionnaire. A sample of 200 members have been contacted by adopting Convenience Sampling technique. Descriptive Statistics have been used to analyze the data. They find that the leader in the business institution makes or breaks the employee motivation level that leads to employee engagement.

ANALYSIS AND INTERPRETATIONS

The analysis of demography profile shows that the most 33 (55%) of the respondents are belong to the age group of below 26-30 years. Majority 39 (65%) of the respondents are male. Majority 34 (56.7%) respondents are educated Under Graduate holders and then the maximum 20 (33.3%) of the respondents are Supervisor of the company. Maximum 38 (63.3%) of the respondents are Married. Majority 21 (35%) of the respondents are 1 to 5 years of experience in the organisation and the Maximum 26 (43.3%) respondents monthly income is Rs.10000 to Rs.18000.

However, as the calculated χ^2 value is greater than the table at five per cent level, the null hypothesis is rejected. Therefore it is concluded that there is a significant association between monthly income of the respondents and Leadership Styles among employees.

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Table-1: T – Test table showing the difference in the mean scores between emotional intelligence & gender

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	5	2.0000	0.00000	0.00000
Female	50	1.3200	0.47121	0.06664

T	Df	Sig. (2-tailed)
3.200	53	.002

The above table depicts that the P value (0.002) is greater than 0.05. So there is a significant difference in the mean scores of the respondents based on the Gender .It is inferred that Gender influence the Emotional Intelligence of the respondents.

Table-2: T – Test table showing the difference in the mean scores between Emotional intelligence & marital status

Marital Status	N	Mean	Std. Deviation	Std. Error Mean
Married	5	1.0000	0.00000	0.00000
Unmarried	50	1.3800	0.49031	0.06934

T	Df	Sig. (2-tailed)
-1.718	53	0.092

The above table depicts that the P value (0.092) is more than 0.05. So there is no significant difference in the mean scores of the respondents based on the Marital Status .It is inferred that Marital Status not influence the Emotional Intelligence of the respondents.

Table-3: T – Test table showing the difference in the mean scores between Leadership styles & gender

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	9	1.2222	.44096	0.14699
Female	43	1.3953	.49471	0.07544

T	Df	Sig. (2-tailed)
-.971	50	0.336

The above table depicts that the P value (0.336) is more than 0.05. So there is no significant difference in the mean scores of the respondents based on the gender .It is inferred that gender not influence the Leadership Styles of the respondents.

Table-4: T – Test table showing the difference in the mean scores between Leadership styles & marital status

Marital Status	N	Mean	Std. Deviation	Std. Error Mean
Married	9	1.4444	0.52705	0.17568
Unmarried	43	1.4186	0.49917	0.07612

T	Df	Sig. (2-tailed)
0.140	50	0.889

The above table depicts that the P value (0.889) is more than 0.05. So there is no significant difference in the mean scores of the respondents based on the marital status .It is inferred that marital status not influence the Leadership Styles of the respondents.

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SIGNIFICANCE (F- TEST) FOR EMOTIONAL INTELLIGENCE BASED ON DEMOGRAPHIC VARIABLES

Table-5: Anova table showing the difference in mean scores between emotional intelligence & demographic variables

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	0.900	2	0.450	0.900	0.412
	Within Groups	28.500	57	0.500		
	Total	29.400	59			
Educational Qualification	Between Groups	0.400	2	0.200	0.335	0.717
	Within Groups	34.000	57	0.596		
	Total	34.400	59			
Monthly income	Between Groups	0.963	2	0.482	0.722	0.490
	Within Groups	38.020	57	0.667		
	Total	38.983	59			

The above table shows that the P value is more than 0.05. So there is no significant difference in the mean scores of the respondents based on level of Emotional Intelligence with respect to age, educational qualification, and monthly income of the respondents. It is inferred that age, educational qualification and monthly income of the respodnents does not influence the Emotional Intelligence.

Table-6: Anova table showing the difference in mean scores between leadership styles & demographic variables

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	1.008	2	0.504	1.012	0.370
	Within Groups	28.392	57	0.498		
	Total	29.400	59			
Educational Qualification	Between Groups	0.399	2	0.199	0.334	0.717
	Within Groups	34.001	57	0.597		
	Total	34.400	59			
Monthly income	Between Groups	0.083	2	0.041	0.061	0.941
	Within Groups	38.901	57	0.682		
	Total	38.983	59			

The above table shows that the P value is more than 0.05. So there is no significant difference in the mean scores of the respondents based on level of Leadership Styles with respect to age, educational qualification, and monthly income of the respondents. It is inferred that age, educational qualification and monthly income of the respodnents does not influence the Leadership Styles.

Table-7: Correlation relationship between emotional intelligence and leadership styles

Correlation		Emotional Intelligence	Leadership styles
Emotional Intelligence	Pearson Correlation	1	-.077
	Sig. (2-tailed)		.560
	N	60	60
Leadership styles	Pearson Correlation	-.077	1
	Sig. (2-tailed)	.560	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

These numbers measure the strength and direction of the linear relationship between the two variables. The correlation coefficient can range from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all. From the variables Emotional Intelligence and

Leadership Styles which is the same as saying that the correlation is positive. Therefore the correlation significant relationship between from the variables Emotional Intelligence and Leadership Styles of the respondents.

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SUGGESTION

All Employees and supervisor may be administered the Emotional Intelligence tool and given feedback on their level of Emotional Intelligence.

- Based on the levels of Emotional Intelligence specific interventions can be planned depending on their area of improvement.
- The management may also think of using an appropriate instrument for selection of employees with required Emotional Intelligence.
- Emotional Intelligence descriptors / events may be used in interviews for selection of candidates to elicit demonstration of specific competencies by HR professionals.
- The organisation may review its HR systems and practices in the light the findings from current investigation with regard to leadership interventions and practices.
- The study revealed that delegating leadership is adopted by a very few respondents. The management may further discuss and explore, analyse the implications.

CONCLUSION

Leadership plays an important role in shaping the behavior and attitudes of the members of an organization. It also determines how people would interact with each other in order to solve problems and take decisions. The field of leadership not only focuses on interpersonal relations but also appreciates the role of a leader as a motivator and energizer. The objective of this research was to enhance the understanding of emerging leadership styles in selected organization in a developing economy. Leadership is very much important in every organisation. When there is a good leadership then the performance of the employees will also be good. Through these team problems are solved, conflicts are avoided, employees gets great support from the superiors in solving the problems as well as in team building. This motivates the employees in the organization to contribute more and feel the atmosphere in a relaxed manner.

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ERGONOMIC IMPACT ON EMPLOYEES' WORK PERFORMANCE

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ABSTRACT
Session: Economic Policies- Business Management

Employees performance is based on various financial and nonfinancial factors out of which, workplace convenience and facilities are important particularly for manufacturing-related employees. This research article attempts to study the impact of ergonomics on the performance of employees. The research was conducted among 80 employees selected using convenience sampling method, in TUBE PRODUCTS OF INDIA, Chennai to identify the factors of ergonomics that support the employees to work efficiently and effectively in TUBE PRODUCTS OF INDIA Chennai.

Keywords: Ergonomics, Employee Performance

INTRODUCTION

Ergonomics is the subject of science which is centered towards human behavior and response with respect to their sitting, standing, and movement. Ergonomics is considered to be a philosophical concept and human way of thinking. It is utilized in various areas like aviation, sports, transportation, education, entertainment equipment and facilities in home, public and workplace. Entire human community benefits from ergonomics design.

Ergonomics is considered to be a scientific concept with common sense but at the same time, the utilization and application may not be easy as it needs to be designed and used by the complex people with different perspectives and preference making the system more complicated to design based on how it can be accommodated.

The demographic combination with a variety of people in gender, qualification, physical abilities and fitness and inbuilt qualities with different cultural and social values. Each individual with varying skills, work experience and knowledge to express reasonable facts.

The workplace may have not required and potentially damaging structural design and arrangements with errors and institutional obstacles. These challenges can lead to a situation where the employees' health and safety are questionable. For most of the employees, it is unaware that the ergonomic impact in their workplace is affecting their mental and physical ability in performing their responsible tasks.

NEED OF THE STUDY

- The study is intended to evaluate the effectiveness of ergonomics in the organization.
- This research study would help the organization to know the improvisation areas, modification requirements necessary to provide a suitable workplace for the employees in the organization to get effective results.
- This research would help the organization to examine the impact of ergonomics on the performance of the employees and helps the employer to understand and design appropriate workplace thereby providing employees additional energy to work effectively and improve productivity.

OBJECTIVES OF THE STUDY

- To study the ergonomic impact on employees performance at Tube Products of India, Chennai.
- To identify the factors creating inconvenience among employees to work with respect ergonomic setup.
- To suggest valuable suggestions, recommendations to improve the workplace ergonomics at Tube Products of India.

RESEARCH METHODOLOGY

Research design

The Research Design considered for the Study is descriptive research design.

Population Size

The universe chooses for the research study is the employees of TUBE PRODUCTS OF INDIA, (Murugappa Group of Company, Chennai) population size is 1057.

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Sampling Area
The sampling area was taken from the production plant of TUBE PRODUCTS OF INDIA, (Murugappa Group of Company, Chennai).

Sample Size: 80
Sampling design: Convenience sampling method

Methods of Data Collection
The study is mainly based on both primary and secondary data.

Primary data: Primary data was collected using an interview schedule by survey method.

Secondary data: The secondary data mainly consists of data and information collected from records, company websites, discussion with the management of the organization and also collected from journals, magazines, and books.

Tools and Techniques for analysis
The following are the various tools applied for analyzing the primary data.

- Percentage method
- Weighted average method
- Chi-square analysis
- Analysis Of Variance (ANOVA)

LIMITATIONS OF THE STUDY

- The sample size is only 80. So the findings may not represent the opinion of the entire population.
- The respondent's opinions may not be accurate because of the chance of misunderstanding, less interest and involvement to respond properly.
- As the research covers the only sample from Chennai, the overall opinion of employees in all branches may vary.

REVIEW OF LITERATURE
According to Smith (1997) stated ergonomics of the workforce is important for the better performance of labors in the workplace. While Wilson (1995) said the management program considering ergonomic factors will involve working people in planning and controlling in the work area to reach the desired results in the work.

More et.al(1996) program for ergonomics with employee participation in the packing industry of red meat resulted in good satisfaction ratings among team members in every aspect of work process implementation.

Narayan et.al(1993) described that the improvements in an assembly plant involving medical devices recorded reduction in accidents and employee dissatisfaction when tools and machines were designed to avoid awkward postures, wrists pains, more standing positions etc with appropriate lighting and ventilation set up.

Riel and Imbeau (1997) felt that helicopter manufacturing plant should have arrangements to handle heavy dies, overexertion and reaction on the body resulting in injuries

Saari (1992) discussed the participatory approach in monitoring waste collection and management and to improve the safety culture in company with ergonomic considerations. Lanoie and Tavenas (1997) in his research concluded that participatory ergonomics program reduces employee health disorders in packers warehouse handling liquor boxes. Ergonomic training and employee safety solutions were essential in improving workforce efficiency.

Table-1: Showing Opinion Towards the Present Work Postures

Feel about present work postures	Number of Respondents	Percentage of Respondents
Highly comfortable	6	7.5
Comfortable	67	83.75
Neutral	6	7.5
Constrained	0	0
Highly constrained	1	1.25
Total	80	100

(Source: Primary Data)

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Table-2: Showing Part of Body Movement Frequently of Employees

Part of body	Number of Respondents	Percentage of Respondents
Hands	29	36.25
Legs	6	7.5
Neck	1	1.25
Shoulder	1	1.25
Eyes	43	53.75
Total	80	100

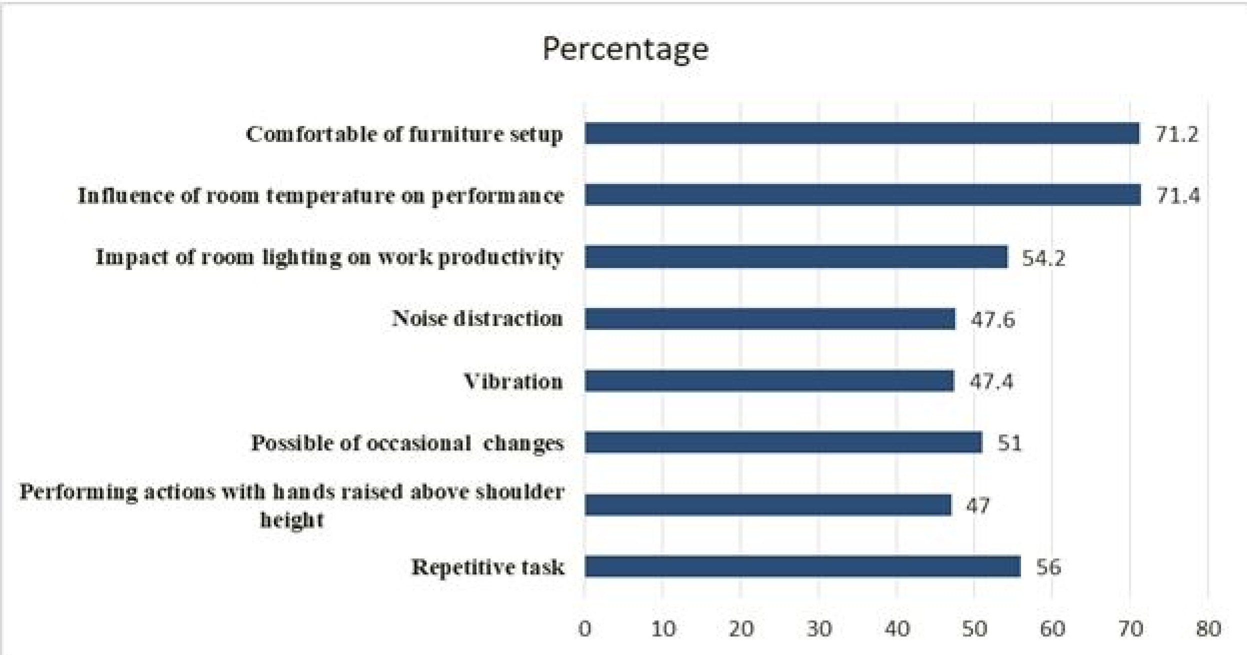
(Source: Primary Data)

Inference: From the above table, it shows that most of the respondents require frequent eyes movement while doing task followed by hands.

Table-3: Showing Factors that Affecting Work Performance of Respondents

Factors	Percentage
Repetitive task	56
Performing actions with hands raised above shoulder height	47
Possible of occasional changes	51
Vibration	47.4
Noise distraction	47.6
Impact of room lighting on work productivity	54.2
Influence of room temperature on performance	71.4
Comfortable of furniture setup	71.2

Figure-1: Showing Factors that Affecting Work Performance of Respondents



Inference: From the above table, it shows that the most important factor affecting the work performance of respondents are room temperature, furniture setup, and repetitive task. The least factor affecting work performance of respondents are noise, vibration and hands raised above the shoulder.

WEIGHTED AVERAGE METHOD – Table-4: Level of Satisfaction – Ergonomics

Factors	Highly Satisfied (5)	Satisfied (4)	Neutral(3)	Dissatisfied (2)	Highly Dissatisfied (1)	Total	Avg Score	Rank
Comfortable office design & infrastructure at work for work postures	135	196	9	2	-	342	22.80	1

Fixtures & furniture in workplace	65	240	21	-	-	326	21.73	2
Comfortable provision for relaxing during leisure time	30	176	84	4	-	294	19.60	10
Easy to communicate with other employees	35	192	75	-	-	302	20.13	7
Equipment, tools & machines for working	60	236	27	-	-	323	21.53	3
Suitable room temperature	45	204	60	-	-	309	20.60	9
Ventilation facilities	60	196	57	-	-	313	20.87	6
Quality of light for visibility	55	224	39	-	-	318	21.20	4
Level of noise from machines, equipment, etc	50	184	60	6	1	301	20.07	8
Seating/standing postures for easy body movements at work	65	200	45	4	-	314	20.93	5

Inference: From the above table it is inferred that the level of satisfaction of ergonomics at rank1 is office design,rank2 is fixtures,rank3 is equipment, rank 4 is light, rank 5 is easy body movements, rank 6 is ventilation, rank 7 is easy communication, rank 8 is noise, rank 9 is room temperature and rank 10 is provided for relaxing.

CHI-SQUARE TESTS

The significant difference between Gender of Respondents and Satisfaction level of ergonomics on Office design

H_0 (Null hypothesis) = There is no significant difference between Gender of Respondents and Satisfaction level of ergonomics on Office design.

Table Shows Significant difference between Gender of Respondents and Satisfaction level of ergonomics on Office design

Table-5: Chi-Square Test

Tests	Value	Df	asymp.sig (2 - sided)
Pearson Chi - square	0.464	3	0.927
Likelihood ratio	0.699	3	0.874
Linear-by-Linear association	0.047	1	0.828

Calculated Value	Tabulated Value	Significance of Difference
0.464	0.927	5%

Calculated value< Table value. Therefore, $H_0$is Accepted.

Inference: There is no significant difference between Gender of Respondents and Satisfaction level of ergonomics on Office design.

The significant difference between Age of Respondents and Satisfaction level of ergonomics on Provision for relaxing

H_0 (Null hypothesis) = There is no significant difference between Age of Respondents and Satisfaction level of ergonomics on Provision for relaxing**.**

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Table Shows Significant difference between Age of Respondents and Satisfaction level of ergonomics on Provision for relaxing

Table-6: Chi-Square Test

Tests	Value	df	asymp.sig (2 - sided)
Pearson Chi – square	13.437	9	0.144
Likelihood ratio	11.176	9	0.264
Linear-by-Linear association	4.362	1	0.037

Calculated Value	Tabulated Value	Significance of Difference
13.437	0.144	5%

Calculated value>Table value. Therefore, $H_0$is rejected.

Inference: There is a significant difference between Age of Respondents and Satisfaction level of ergonomics on Provision for relaxing**.**

ANOVA TEST

H_0 (Null hypothesis) = There is no significant difference between the Causes of Work-related Musculoskeletal Disorders of Respondents on Awkward postures and frequent health effects due to wrong workplace ergonomics.

Table-7: Significant difference between the Causes of Work-related Musculoskeletal Disorders of Respondents on Awkward postures and Frequent health effects due to wrong workplace ergonomics.

Effects		Sum of Squares	Df	Mean Square	F	Sig.	Findings
Fatigue	Between Groups	4.65	2	2.33	9.87	0.00	H_0 is accepted
	Within Groups	18.15	77	0.24			
	Total	22.80	79				
Headache	Between Groups	1.28	2	0.64	2.00	0.14	H_0 is accepted
	Within Groups	24.67	77	0.32			
	Total	25.95	79				
Neck & muscle pain	Between Groups	1.54	2	0.77	1.00	0.37	H_0 is accepted
	Within Groups	59.26	77	0.77			
	Total	60.80	79				
Get tensed more often	Between Groups	0.12	2	0.06	0.11	0.90	H_0 is rejected
	Within Groups	43.57	77	0.57			
	Total	43.69	79				
High blood pressure	Between Groups	4.79	2	2.40	3.77	0.03	H_0 is accepted
	Within Groups	48.89	77	0.63			
	Total	53.69	79				

Calculated value> Table value. Therefore, $H_0$is rejected.

Inference: There is no relation between the causes of MSD and health effects (Fatigue, Headache, Neck & muscle pain, and High blood pressure). But, there is a relation between the causes of MSD and frequent health effect due to getting tension.

FINDINGS

- The respondents among the employees are mostly male compared to female employees.
- Most of the respondents are in the qualification of UG and PG level, very fewer respondents have the qualification of Diploma and HSC.
- Most of the respondents are earning an average salary in rupees between 21000 to 30000 and 30000 to 50000.
- From the study, it was found that most of the respondents spend 6-8 hours at their work desk and respondents spending more than 8 hours is 8.75%.
- The study reveals that most of the respondents feel comfortable about their present work postures.

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- Most of the respondents feel that their eyes require frequent movements to perform their task, followed by hands.
- From the study, it is found that there is no significant difference between Gender of Respondents and Satisfaction level of ergonomics on office design.
- From the study, it is observed that there is a significant difference between Age of Respondents and Satisfaction level of ergonomics on provision for relaxing.
- From the study, it is found that there is a relation between the causes of MSD and frequent health effect due to getting tension.
- From the study, it is observed that the satisfaction level of respondents on workplace ergonomics is highly satisfied with office design.

SUGGESTIONS

The suggestions for the findings from the study are the following

- ➢ For the employees, the comfortable provision for relaxing during leisure time can be improved. So that, the efficiency increases.
- ➢ The arrangement of the tool, equipment, and machines for working can be enhanced for the better performance of employees.
- ➢ The level of noise from machines and equipment can be reduced by using appropriate methods else replacement of old noisy machines can be made.
- ➢ As most of the employees are regular, the employees can be given periodically training regarding better work postures and to handle machines and equipment without having health hazards.
- ➢ The employees can be advised to have a few minutes of relaxation for the eyes, hands, legs etc with exercise or meditation.

CONCLUSION

In today's competitive scenario, the limited resources available to the firm must be rationally utilized to enhance the performance and efficiency of the firm and provide better value to consumers with satisfied employees. This study had made an effort to study the impact of ergonomic factors influencing employees work performance in production areas and it can be utilized by all manufacturing enterprise throughout the country to assess the impact of ergonomic arrangements with their employee performance levels and to make necessary changes accordingly to reduce the mental and physical problems due to work stress and movements and thereby to increase their workforce efficiency.

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EVALUATION OF AFFORDABLE HOUSING INITIATIVES WITH REFERENCE TO HOUSING FOR ALL BY 2022- PRADHAN MANTRI AWAS YOJANA (URBAN)

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ABSTRACT
Over the last three decades, India has become a flashpoint for housing crises and policy experiments due to the increasing number of homeless and the corresponding increase in population. India has followed neoliberalism since 1991 by an increasing adoption of the rules and methods for the Housing market, and the housing problem has persisted, which has lead to changes and innovations in the housing policy, delivery of the finished products and governancein the policy. Throught India, PMAY-HFA (Pradhan Mantri Awas Yojana - Housing for All) was launched in 2015 to provide housing to all homeless by 2022. Since the introduction of PMAY, the National Urban Housing and Habitat Policy (2007) is being revised to accommodate the new perspective. With this the researcher evaluated the progress of PMAY – Urban, awareness and belief and challenges towards this mission of House for all by 2022

JEL Classification: R200, R210, R31

Keywords: Affordable House, Pradhan Mantri Awas Yojana, Housing for All, Urban Housing

INTRODUCTION

Housing is being increasingly viewed as being important for overall infrastructural development in the economy. Moreover, housing constitutes an important element of human life which many aspire to achieve in their lifetime. It has the potential to contribute to a rise in national income, because of the linkages with various other sectors providing goods and support services. As per 2011 Census, 1.77 million were homeless people in India, or 0.15% of the country's total population. The number is still increasing due to growth in population. Now, There is a shortage of 18.78 million houses in the country. Central Government introduced many policies and schemes to provide housing for everone . Some of them are National Housing and Habitat Policy(NHHP), 1998, Golden Jubliee Rural Housing Finance Scheme(GJRHFS) 1998, National Housing and Habitat Policy , 2007, Rajiv Awas Yojana, Indira Awas Yojana and the latest is PMAY. Government of India launched the flagship program “Pradhan Mantri Awas Yojana (Urban) – Housing for All” on 25th June 2015 to meet the housing shortage in urban areas. End of 2018, Prime Minister Narendra Modi introduced housing schemes worth Rs 50,000 crores wherein the homeless were assured houses in the next three years. The slums in the country are growing at a rate of 34%, which will lead to slums being close to 18 million and the mission will cover 2 million non-slum urban poor households which is proposed to be covered under the Mission.All the statutory towns as per Census 2011 and the notified towns will be eligible under the Mission.

PRADHAN MANTRI AWAS YOJANA- HOUSING FOR ALL BY 2022

One of the Indian Government’s ambitious projects, the PMAY was started in 2015 and is expected to be completed by 2022 as per the targets set by the government and the same will provide central assistance to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs. The mission can be executed in different ways as per the requirement of the location where the scheme will be implemented.

For the Rehabilitation of existing slum dwellers using land as a resource through private participation, 2. Credit Linked Subsidy, 3. Affordable Housing in Partnership with all the relevant bodies concerned, and 4. Subsidy for Beneficiary-led individual house construction/enhancement. Under this scheme, affordable houses will be built in selected cities and towns using eco-friendly construction methods for the benefit of the urban poor population in India. Also, under the Credit Linked Subsidy Scheme (CLSS), beneficiaries under PM Awas Yojana are eligible for interest subsidy if they avail a loan to purchase or construct a house.

The scheme on completion is expected to cover the urban area which consists of 4041 statutory towns with initial focus on 500 Class 1 cities and the same will be implemented in three phases: Fron April 2015 – March 2017, the scheme will cover 100 cities to be selected from States/UTs as per the consent of the people. The second phase will be from April 2017 to March 2019 and will cover the additional 200 cities and Phase three which is from April 2019 to March 20200 will cover the remaining cities. All the schemes will be interlinked and will not over lapse and will cover all the homeless concerned.

REVIEW OF LITERATURE

Ramakrishna Nallathiga (2007) mentioned in his study that the policy focus shifted from delivery of housing unit to facilitating its provision in line with changes in macro-economic policy. Here, the government provides incentives to various actors e.g., liberalising home financing, providing tax incentives, which encourage housing becoming a private activity. Experts feel that the number of beneficiaries is guess work, but it improved urban housing to some extent. It has, however, not been able to address housing for poor and low income groups, which will come through local government innovations and State government support. Similarly, the details of the homeless will be known to the local authorities which itself is going to be a herculean task. Also, the policy has not addressed some supply side issues e.g., regulatory impediments like land ceilings, rent controls, high transaction prices and secure property rights in the form of titles.

According to economic times article (2018), Affordable housing has been given infrastructure status in Budget 2017, which should aid developers in takings its associated benefits. The timely delivery of the house is still a distant dream for many buyers. For the benefits to be passed on to the builder, he had to complete the project in three years and the same has been increased to five years now.

According to the article of bank bazaar.com(2018), due to shortage of sand, the houses that are being constructed under the PMAY scheme in Tamil Nadu are costing Rs. 2 Lakh extra. A joint study by Inclusive Cities Partnership Programme (ICPP) and Ministry of Housing and Urban Affairs (MoHUA) and GIZ India lead to the findings. The study also found that due to the increase in the cost of building houses, the people were forced to take money on high interest from private lenders as they are not eligible for loans from banks due to their low income level. Moreover only 10 percent of the total houses out of 3,66,165 were constructed under the mission.

OBJECTIVES OF THE STUDY

- To the examine the progress of Pradhan Mantri Awas Yojana (Urban) through credit linked subsidy scheme
- To study the attitude of homeless people of economically Weaker section and Middle-Income Group towards the mission of house for all by 2022
- To find out the challenges in the mission of house for all by 2022

HYPOTHESES OF THE STUDY

H_{01}: This scheme is not benefitable to the homeless people who belong to Economically Weaker Section.

H_{02}: There is no relationship between the security in employment and buying the house & availing the benefit under this scheme.

RESEARCH METHODOLOGY

The nature of the study is empirical. The study is evaluating the mission of house for all from the view of affordable house to homeless Economically Weaker Section(EWS) and Middle Income Group (MIG) people in Mumbai. Primary data and secondary data have been used for the study. Survey method was used to collect primary data and secondary data was taken from the website of Ministry of Housing and Affairs, books and internet. Period of the study is 3 months, from November 2018 to January 2019. Sample size is 100 in total which was collected equally from each groupi.e EWS and MIG. The Convenience and Judgement sampling technique was used to collect the data from the respondents. Analysis tool like Ratio, ANOVA and Chi-Square used to analysis the data and test the hypothesis.

PROGRESS: HOUSING FOR ALL BY 2022

Credit linked subsidy component was implemented as a Central Sector Scheme while other three components was implemented as Centrally Sponsored Scheme (CSS). The benefits under this scheme through Credit Linked Subsidy Scheme(CLSS) are illustrated in the table No.1

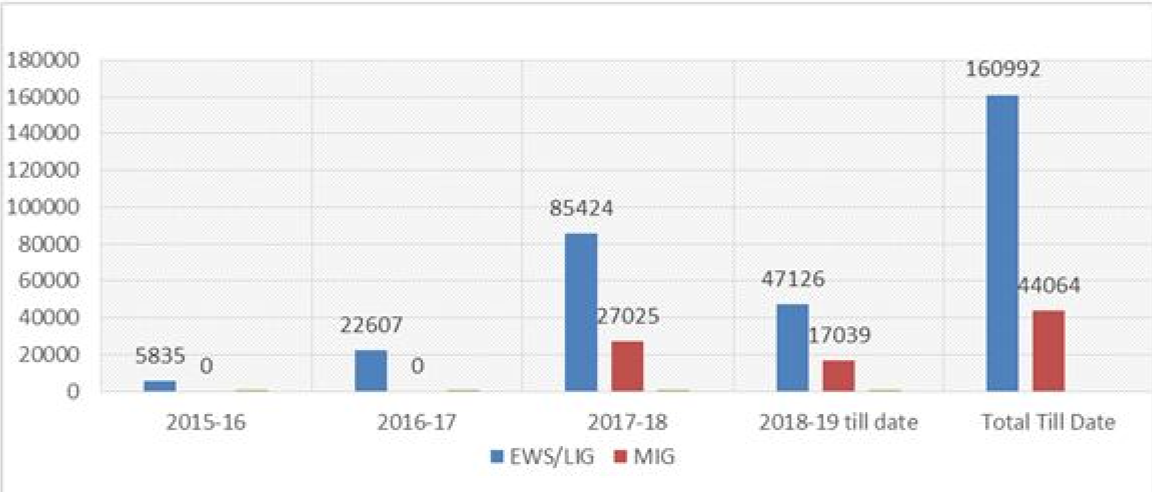
Table No-1: Credit Linked Subsidy Scheme (CLSS)

Particulars	EWS	LIG	MIG I	MIG II
Household Income (Rs.)	Upto 3,00,000/-	3,00,001/- to 6,00,000/-	6,00,001/- to 12,00,000/-	12,00,001/- to 18,00,000/-
Dwelling Unit Carpet Area (Up to) in sq. m & approval Month	30	60	160	200
Interest Subsidy (% p.a.)	6.5%		4.0%	3.0%
Maximum Loan Tenure	20 Years			
Eligible Housing Loan Amount for Interest Subsidy (Rs)*	6,00,000/-		9,00,000/-	12,00,000/-
Discounted Rate for Net Present Value (NPV) calculation	9%			
Upfront Amount for Subsidy (Rs.) for a 20 Year Loan	2,67,280/-		2,35,068/-	2,30,156/-
Savings in Monthly EMI (Rs.) Approx. @ Loan Interest of 10%	2,500/-		2,250/-	2,200/-

Source: www.mohua.gov.in

The Chart No. 1 shows that, total Houses Sanctioned under this scheme is ₹53.79 Lakh and Houses Grounded is ₹29.49 Lakh till 2018. Total investment in the project at the end of July 2018 is ₹2, 96,169 Crore. Out of it, Central Assistance Committed was ₹81,952 Crore. Central Assistance sanctioned and Released were ₹38,783 Crore and ₹27,811 Crore respectively till July 2018.

Chart No-1: CLSS-No. of Beneficiary –YOY



Source: www.mohua.gov.in

CHALLENGES TO THIS SCHEME

There are a number of challenges facing affordable housing. High cost of land, which is the consequence of a number of factors, is one of the principal challenges. Land is a precious commodity and its unavailability in metropolitan cities in India has affected development of affordable housing in areas where it is actually required. The concept does seem to provide a lucid solution to the prevailing housing woes, as its execution is intricate owing to the lack of clear policy framework to meet this ambitious target, unavailability of urban land at reasonable prices, rising costs of construction, high fees and taxes, regulatory issues and unfavorable development norms. A project of such magnitude requires huge investments and a large skill development program for timely completion. While thrust on encouraging private sector participation can provide the answer to India's urban housing predicament, there are multiple concerns owing to which developers are hesitant to enter into this segment. Although, tax benefits have been announced to encourage more builders to take up construction of affordable homes, its turnaround will be difficult without access to cheaper capital as the margins are very thin in this space.

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PRIMARY DATA ANALYSIS AND RESULT DISCUSSION

- **Occupation**

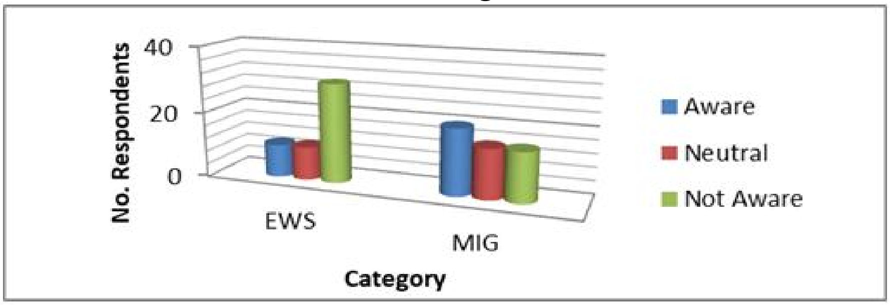
Majority of the respondents i.e 45% from Economically Weaker Section (EWS) and Middle Income Group (MIG) are have temporary occupation. They don't have permanent job or business. Next to that, 26% of the respondents are employed in private organations . 25% are doing their own business and only 4% are working in government based organisation.

- **Job Security**

45% of the respondents feels that their job or business is not secured. 35% of the respondents feels their job is some what secured but not fully secured. Around 20% only have a secured job. This shows that most of the respondents have temporary job with no security.

- **Knowledge and Awarness**

Chart No-2: Knowledge and Awarness



Source: Primary Data

This chart No.2 shows that majority of the respondents belong to EWS are not aware of this scheme and majority of the respondents fron MIG have knowledge and are aware about this scheme.

- **Opinion regarding the Benefit of the scheme**

60% of the respondents from EWS are consider this scheme is not benefitable to them due to various factors and only 10% of them consider this is benefitable to them. In the case of respondents belong to MIG, 40% are feeling that this scheme is not benefitable to the city like Mumbai and 50% are feeling that this is useful to them.

TESTING OF HYPOTHESES

H_{01}: This scheme is not benefitable to the homeless people who belongs to Economically Weaker Section

Table No-2: ANOVA – Opinion regarding benefitable to EWS

	Sum of square	Df	Mean square	F	P-value
Between Groups Within Group	89.43556 341.3556	4 45	22.358 0.767	29.147	1.54
Total	430.7911	461			

Note: Result computed using SPSS 21.0

It is observed from the result of ANOVA in Table 2, the calculated *p* value is 1.54, which is more than .05(at 5% level of significance). As the *p* value is more than .05. Hence, H0 1 is accepted. Hence it can be inferred that this scheme is not benefitable to EWS.

- **Utilisation of the Scheme**

Out of the total respondents only 6% are availed benefit under this scheme and they are also belong to MIG category. No one availed this benefits under the category of EWS.

TESTING OF HYPOTHESES

H_{02}: There is no relationship between the security in employment and buying the house & availing the benefit under this scheme.

Table No-3: Chi-Square Test – Relationship between Security and Buying House

	Value	df	p- value
Pearson Chi-Square	70.588	2	.000
Likelihood Ratio	62.048	2	.000
Linear-by-Linear Association	46.464	1	.000
N of Valid Cases	100		

Note: Result computed using SPSS 21.0

It is observed from the result of chi-Square test in table 3, the calculated *p* value is .00, which is less than .05(at 5% level of significance). As the *p* value is less than .05. Hence, H0 2 is rejected. Hence it can be inferred that there is a relationship between the security in employment and availing house under this scheme.

- **Resons for not availed**

Based on the analysis, top reason for not availed this benefit is that they don't have enough money to buy house. Next to it is No Job opportunity in the proposed place under PPP scheme. Then No permanent job is the next reason. 16% said that Not able to buy in city/suburban & very costly in Mumbai and they also feels this scheme is not suitable for EWS who belongs to Mumbai.

FINDINGS

- Most of the respondent's job or business is not secured. The reason for that most of them doing the job or business in unorganised sector.
- Compared to MIG, EWS are not have enough knowledge and awareness about this scheme.
- 60% of the respondents from EWS are consider that this scheme is not benefitable to them due to various factors and 40% of MIG are feeling that this scheme is not benefitable to the city like Mumbai and 50% are feeling that this is useful to them.
- Only 6% of MIG are utilised this scheme to get benefit and no one aviled benefit under the category of EWS.
- This scheme is not benefitalbe to EWS who belongs to Mumbai because cost of house in Mumbai and its close region. They can buy the house out of these region only, in such a case that will affect their earnings for livelihood due to unemplynent and less opportunity to do business.
- Security in employment/occupation affect the behaviour of buying the house and availing this scheme. Moreover, if people are not able to buy the house, they hoe they will utilise this scheme.
- Not having enough money, No job opportunity in the place where the people can buy house with less amont, High cost in Mum bai and its sun-urban and No job security are the major reason for hot buying the house and not avaing this scheme.
- **Scarcity of land, high cost of land, Massive capital expenditure at every stage, Lack of incentive to private players are the major challenges to this scheme.**
- This scheme doesn't motivate the people to buy their own house.
- This scheme will benefit small towns, cities, sub-urban and not for the Metros like Mumbai where the cost of land is too high.

CONCLUSION AND SUGGESTIONS

After food and clothing, shelter is the basic requirement for humans and even after 70 years of getting independence, India is struggling primarily to the increase of population over the last few decades which has lead to shortage of land and other issues. None of the governments has been able to tackle the increasing population and no concrete steps has been taken for it. The Mission and the scheme provide a radical departure from the earlier approach of "one size fits all", of previous Governments towards rural and urban housing schemes. Effective implementation of the Mission and Pradhan Mantri Awas Yojana is dependent, among other factors, on the States and urban local bodies evolving a effective policy framework for Economically Weaker Section (EWS) and Lower Income Group (LIG) housing, eliminating the need for multiple approvals and long time period involved in obtaining them, reducing the cost of capital, easy availability of land and its optimal usage. The challenge of the Mission is to create a governance climate that would trigger multiple solutions to these issues. Following are the **suggestions**

- This scheme has to be modified for EWS who belongs to city like Mumbai because cost of house is too high in Mumbai and its closed region and they can't afford to buy even a small flat.
- Eligibility based on Household income category has to increase for the house buyer in Mumbai.
- The state government has to change this scheme according to the neess of Mumbai city, to achieve the mission of affordable housing for all by 2022.

Moreover, it has been noticed that the population has been centred in Mumbai city leading to over crowding and making it difficult for the corporation to provide the basic needs. The facilities and the job opportunities should be scattered in order to encourage the people to go to newer places. The government should free large land

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parcels out of Mumbai and provide job opportunities there, which will encourage people to settle thereby easing the burden on the city.

LIMITATIONS AND SCOPE FOR FURTHER STUDY

The sample size of the study is very less compared to the population of Mumbai. This study is conducted at the end of 2018, hence the result of this study may not be applicable in future. The same study can be conducted in other cities and towns in India.

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MID-DAY MEAL PROGRAMME (MDMS) IN PRIMARY SCHOOLS: MONITORING AND CONTROL USING INTERACTIVE VOICE RESPONSE SYSTEM

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ABSTRACT

Nutritional food is a significant indicator of growth, development, nutritional status and health, as poor diet and frequent infections can lead to growth retardation and even leads to malnutrition. It appears that nutrition supplementation is beneficial for the school children in form of Mid-Day Meal Scheme in primary schools for better growth, increase in school attendance and reduction in the dropout rate, it also improves intelligence and cognitive function to a marginal extent. Hence, it is mandatory to evaluate the effects of Mid-Day Meal Scheme, to judge the nutritional status of receiving the meals and should have continuous monitoring of the food grains and food served using ICT intervention with IVRS system.

Keywords: Nutrition, Primary School Children, Mid-Day Meal, Hygiene, Employment, Biometric Attendance, IVRS System.

1. INTRODUCTION

After independence the government of India started various nutritional supplementation programmes to uplift the nutritional status of the children. Among them, the National Programme of Nutritional Support for Primary Education (NPNSPE) i.e. Mid-Day Meal Scheme (MDMS) was launched as a central scheme which is meant for primary school-going children. It involves provision of lunch free of cost to school-children on all working days. The objective of this scheme is to give boost to universalization of primary education and the nutrition of students in primary classes, protecting children from classroom hunger, increasing school enrolment and attendance, improving socialisation among children belonging to all castes, addressing malnutrition, and social empowerment through provision of employment to women. The mid-day meal (MDM) programme in India was first introduced in the year 1925 as a school lunch or school meal for the children of Madras Municipal Corporation. In 1956, K. Kamaraj, the Chief Minister of Madras, set up a feeding programme to distribute food to the poor children from the rural areas. In 1982, M. G. Ramachandran, the Chief Minister of Tamil Nadu, set up a scheme called the Nutritious Meal Programme.

At a national level, the scheme was introduced in the year 1995 by the Ministry of Human Resource Development, Department of School Education, and Literacy by the name National Programme of Nutritional Support to Primary Education (NP-NSPE) as a centrally sponsored scheme. It was started on 15th August 1995 by the Prime Minister of India, P.V. Narsimha Rao. As the name indicates the children attending the elementary section of school i.e the primary section children are the chief beneficiaries. Supply of one supplementary meal is the main purpose of this programme. The Mid-Day Meal Scheme (MDMS) was limited to providing dry rations. It was in the year 2001, when the Supreme Court in its major landmark passed an order directing all states to start providing cooked midday meals in all states of the country. By March 2004, The NP-NSPE was revised and all primary schools were started providing cooked midday meals in all states of the country. Later, it was extended to upper primary (classes VI to VIII) school children. Today, MDMS is world’s largest feeding programme reaching up to about 12 crore children. The objectives is enhancing school enrolment, student retention, improving student attendance, and improving nutritional status of children. The school-age children are in the phase of rapid growth and development, and hence, their nutritional needs are considerable.

2. REVIEW OF LITERATURE

Currently, the government of India contributes grains for the midday meal 100gms per child per day free of cost through the Food Corporation of India and a sum of Rs 1.50 per child per day towards cooking costs, on the condition that state governments contribute at least 50 paise per child per day. The provision for replacement of kitchen devices at an average cost of Rs. 5,000 per school. Like LPG, Stove, Chulha, etc. From the study it was observed that all the children from the schools had MDM served only during lunch break and consumed food in the school premises itself. From April 2005, a cooked meal according to the menu that is based on children’s preference. It was encouraging to know that all the dishes served in mid-day meal were mostly preferred by children. The children were given varied dishes like rice and dal, chapatti sabji, fruits and other snacks like biscuits, etc. About nine crores children benefited from hot cooked nutritious food in schools during 2017-18. A separate provision for payment of honorarium to cook-cum-helper @ Rs. 1000/- per month has been made. One cook-cum-helper is engaged in a school with 25 students, 2 cooks-cum-helpers for schools having 26 to 100

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students and one additional cook-cum-helper for every addition of up to 100 students. Almost twenty five lakhs cook-cum-helpers mainly from weaker section communities have been engaged to provide Mid-Day meal to school children. Additionally, the government of India contributes some amount towards transportation charges and monitoring and evaluation.

This scheme has many benefits such as increasing enrolment and attendance in schools, especially of girl children, and addressing the issue of classroom hunger, thereby also increasing learning ability. They analysed that the effect of food supplementation in rural primary school children was studied on physical growth and mental functions. Children receiving the supplementation showed marginal increment in full scale, verbal and performance IQ[2]. The distribution of the food is as follows:[3]

Sr. No.	Items	Quantity per day per child	
		Primary School	Upper Primary School
1	Food grains	100 gms	150 gms
2	Pulses	20 gms	30 gms
3	Vegetables	50 gms	75 gms
4	Oil and fat	5 gms	7.5 gms
5	Salt and Condiments	Based on requirement	Based on requirement

3. Existing System

MDM programme has many potential benefits: attracting children from disadvantaged section to schools in order to improve regularity, nutritional benefits, and benefits to women and men of weaker section in form of employment. The women from rural area are participating as self-help group agency which gives employment. The kitchen garden: they have developed in the school campus to grow vegetables especially green leafy vegetables and few fruits such as – banana, papaya, coconut etc. which requires least amount of human efforts. This nutritional food supplement is given as additional twice a week. The government is providing eggs or banana twice a week to the children from its own resource. Government has provided a MDM calendar to all schools and offices of Education Department for the weekly menu, calorie chart, norms like- cooking cost, kitchen cost, cook-cum-helper, transportation cost, food grain entitlement, no of day's MDM to be served.

Women working on the kitchen have major concern with the storage. Tall aluminium storage containers should be used to store food grains and other ingredients. Big aluminium utensils are used for cooking and serving. There is a facility of multi tap hands group washing before serving a meal to maintain the hygiene. As teachers play an important role, they can encourage children to consume the meals and sensitize them for good hygiene and sanitation practices. But there is no track of the food grains supplied by the government, the food which is distributed to the school children and the amount of food which is getting wasted.

4. PROBLEM STATEMENT

Children are the most vulnerable segment that suffers from malnutrition and nutritional deficiency. Under nutrition during any period of childhood, it can have negative effects on the self-development which leads to poor school performance among children. A study to get the knowledge regarding an importance of mid-day meal programme among parents of school going children in selected rural area with a view to develop a self-instructional module on mid-day meal programme. In many schools of that area the same menu is given every day usually chapatti, watery gravy sabji, rice and a watery dal or sambhar with no vegetables, eggs, fruits. Because the delivery of the food was too early, the food was getting cold by the time it was served to children.

Mid-day meal is meant to increases attendance, improves quality of education, brings social and gender equity however various drawbacks have also been listed, lack of information on the NP-NSPE guidelines, inadequate funds for utensils and infrastructure; low and delayed reimbursement of salaries, lack of support from school staff and poor working conditions leading to low motivation in the MDM staff members. Limited usage of vegetables in MDM, unhygienic cooking and working conditions, lack of variety in the menu and interrupted services with compromised quality. The problems associated with MDM were, insufficient food which lead to dissatisfaction among the parents and students, no separate room for serving food and eating and poor quality of raw ingredients. Irregular releases of funds and salaries to the cooks and helpers were making them unsatisfied.

5. OBJECTIVE

To keep track of the quality and distribution of Mid-Day Meal Scheme. Collect the information on the number of children to whom mid-day meal has not been served. Make the daily bases information available on website through IVRS and displayed on website to government access.

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6. PROPOSED SYSTEM

The problem arises in keeping track and monitoring of the food grains as well as the cooked food since large amount of cooked food is getting wasted or else taken away by the members of the MDM and not reachable to the school children. In order to overcome this major issue of keeping track of the ration -food grains, vegetables and fruits etc. there has to be a quality monitoring cell which will monitor through the ICT intervention using IVRS system.

The Interactive Voice Response System (IVRS) is based on Daily Monitoring System project. This project visualizes an automated Management Information System (MIS) where data of children availing mid-day meal is recorded on a daily basis. Biometric will also be used to keep the count of the no of children availing mid-day meal on the particular day. The interface between computers and mobile phones are used. This provides school wise information access on real time basis through an out-bound dialling solution where in calls are placed to all the teachers from a virtual number using PRI lines. The system generated compilation of the count of number of children who availed MDM would be noted by teachers and will be displayed on the web the same day. Tablet based inspection, individual websites of all the schools implementing MDM for monitoring and smooth implementation can be introduced. Implementation of tablet pc based inspection system with geo-tagging and time stamping of inspection photos will ensures inspection also facilitates the record keeping of huge inspection data.

7. METHODOLOGY

Methodology deals with the research design, literature review and study, population, tools to be used.

8. RESEARCH DESIGN

The research design used for this study is to identify the benefits and usefulness of the MDM scheme for children and overcome the flaws under Quality Monitoring Cell with the use of ICT intervention - IVRS system in mid-day meal programme.

9. POPULATION

The population elected for this study is the women self-group, cook-cum-helper, parents of school going children, whom the variety of questions were asked and data was collected.

10. CASE STUDY

An actual study is done on MDM programme in Chiplun village situated in Ratnagiri District.

Two ladies Rashmi Rajendra Dere and Seema Sudhir Dandekar from a small town Pethmap in Chiplun took initiative and established Zidd Mahila Gat in 2002. In 2004 they were the first group to start the Mid Day Meal programme in different schools in Chiplun. Now it has been decentralised to other different groups.

In this group about 22 ladies are working for this programme .They have distributed their work in different categories according to the expertise like cleaning of grains, cooking meal, washing utensils, distributing meal. They are providing meals to 5 different schools in Chiplun.

Sr. No	School Name	No Of Students
1	Kanya Shala, Chiplun	35
2	Savarde High School	900
3	Kamthe No 2	125
4	Prathamic vidyalaya Sati	365
5	Chiplun No.1, Chinchnaka	50

This group follows a proper chart provided by Government to provide nutritional food to students.

Day	Type of Food
Monday	Mixed Rice, Pulses and vegetables Khichadi
Tuesday	Rice with Sprouted grains Sabji
Wednesday	Dal , Rice
Thursday	Masala Bhat with some snacks like biscuits or groundnut chikki
Friday	Mixed vegetable Dal with Rice
Saturday	Mixed Rice, Pulses and vegetables Khichadi

The very first school they started with was Kanya Shala which is girls school only. It was a remote area school and parents were not allowing girls to study. But because of this MDM Programme parents started sending their daughters to school. This was a great success of this Programme.

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The same situation is with the Chiplun No 1 school. The students studying in this school are so poor that they come to this school for having a proper meal.

Many ladies including 22 members of this Gat got employment in this remote area. They are able to earn and are partially fulfilling the demands of their family.

These ladies are facing many challenges like low income, less grains supply from government, less supply of LPG etc. But still they are continuing this for the benefit of poor children.

Because of this groups continuous efforts and extraordinary work they are felicitated by different political parties like Shivsena and Ratravadi . In 2005 they were felicitated by Mr. Kumbhar in Navi Mumbai.

11. CONCLUSION

Using IVRS daily monitoring system, the transmission of data will be in real time and hence there is no scope for data manipulation. There will be transparency in the system in order to get the exact figure and real time monitoring and control over the wastage and corruption in large amount of food grains. Regular meetings with the cook, helper and women working for MDM should be conducted to identify the quantity and quality of the food grains. There should be the provision of free food grains –to ensure attendance of girls in schools under the scheme "beti bachaoo beti padhaho ".who have more than 60% attendance and marks are entitled for this. For hygiene there should be the provision of caps, hand gloves and aprons, provision of big aluminium containers for safe and hygienic storage of dry food grains. Organic farming, Quality Monitoring Cell Distribution of packet food should also be considered.

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A STUDY ON BUYER PREFERENCE TOWARDS TATA NANO CAR IN DINDIGUL DISTRICT

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ABSTRACT
Introduction of automobile industry and statement of the problems are explained. The key objective of the study and few review of literature explained appropriately. The factors which influencing TATA Nano car in Dindigul district and the reasons for preferring TATA Nana car are discussed. The suggestion to the TATA Motors and Central government are described in detail.

Keywords: automobile industry, TATA Nano car, fuel efficiency, zero maintenance.

INTRODUCTION
The automobile industry is considered to be high growth as it helps the other sectors of the economy. For developing countries like India, its contribution towards the promotion of engineering related industries, generation of direct and indirect employment is significant. The automobile industry serves as a catalyst for the overall economic development. Transport serves as an important factor for the economic development."Right from the days of Adam and Eve on earth, Almighty created the earth, sky and separated dark and light; created Sun and Moon, and the human being Adam and Eve inhabited in God created garden. When man began to multiply on the face of the earth, mankind moved, wandered and travelled from one place to another for their livelihood, food, shelter and safety from forestry and jungle animals and brutes." [1] Man was uncivilized, illiterate and untrained at that time. They hunted animals for food and also for some other need based issues.

After millions and millions of years, man was civilized by educating himself, expressing his views, and living in one place. Man travelled for trade, marketing and his movements became very frequent. They used horses, bullock carts on surfaces, camels on deserts, boats on rivers and ships on sea.

STATEMENT OF THE PROBLEM
The Indian automobile industry has got a tremendous market potential. With the growth of population and changes in the life style of people, and also due to urbanization, there has been a rapid increase in demand for Indian automobiles. As the passenger car market in developed countries saturated, the global automobile manufacturers turned their attention towards countries such as India and China which offered scope for appreciable market growth. There are many car manufacturers who introduced their latest model cars in Indian market are facing many problems. There is an imbalance between supply and demand of cars. There is always an upward trend in the cost of fuels. There are many new global car manufacturers competing for aggressive car sales in Indian market and the marketers of car adopted penetration pricing strategy. In this context, Indian car buyers find it difficult to evaluate cars in the market within their reach. They try to analyze various values of fuel efficiency, zero maintenance, design, style of the car at an affordable cost and there sale value in the second hand or used car market. Middle class buyers have never dreamt of owning a car for the purpose of their own utility. Due to effective Liberlisation, Privatisation, Globalization, and the cultural transformation that provoked everywhere, which cause to own a car for utlilisation by general public for their personal purposes. Hence, the quality awareness among the car travelling public have increased enormously. Therefore, the car producers also began to target the middle class buyers to sell the cars at low cost.The buyer prefers TATA Nano car when compared to the other brands because the car is within the economic affordability. The Nano car of TATA Motors is easy to drive in heavy traffic, and in the small lanes of the street. It is also easy for the elders and women to drive and provide more leg room space and high ground clearance. The producers actually fulfill the buyer's expectation for their full satisfaction, where the service quality plays a vital role in preferring TATA Nano cars among the travelling public. In spite of rise in fuel prices, the number of car owners is increasing rapidly because of the recognition, utility, market trends, after sale services and affordable cost. In recent years, car has become an essential item for all travelling public in the daily walk of life. Public who work in various organizations at various capacities such as traders, businessmen, senior officers and officials of government and non-government bodies are also thinking vigorously to own car for their utility, and travel for place of work from home.

TATA Nano car is intended as an all time weather condition vehicle for personal motoring that provides safer, alternative to the two-wheelers that are prevalent in Indian roads and Indian car market for consumers. TATA Motors with their tiresome effort, finally launched prestigious and celebrated People's car at rupees one lakh as TATA Nano by TATA Motors. TATA Nano car on roads, was claimed by travelling public and owners that the

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car is very comfortable seating capacity, safe, all time weather condition support with fuel efficiency and low carbon emission. The compact design on roads has solved as early stated, many problems that is of parking space, most accommodative, zero maintenance, resale value and best services after sales in their dealer outlet.

OBJECTIVES OF THE STUDY

1. To identify the factors which influence the buyers to prefer TATA Nano car such as comfort, cost, convenience, user friendly and technology in Dindigul district.
2. To examine the reasons for preferring the TATA Nano car such as fuel efficiency, maintenance cost, price of the car, resale value and the like.

REVIEW OF LITERATURE

Beena John,(2013)[3] in his article "A Study of Small Car Consumer Preference in Pune city" described that the Indian automobile small car business is influenced by the presence of many national and international manufactures after the policy of liberlisation in 1991. The presence of many manufacturers and variant provides several decisions of the customers as the similar product proposition, creating the passenger car markets highly competitive. Customer now searches for those different parameter which may help them to choose among the alternative product available in the market.

Vikram Shende, (2014)[4], in his study pointed that there are various major class of consumer behaviour determinants and expectations, namely socioeconomic, psychological, political, geographical, demographic and product and technology. Further classification of human behaviours under main categories will enable car manufacturer to align their strategies in concurrence to customer behaviour. While purchasing mini segment car, though customer is highly cost conscious but this segment is also upgrading their requirements and due to rise in disposable income, within segment migration is observed. Customer is more inclined to purchase Suzuki Swift for mid size segment customer focus is for safety, driving seating comfort, and brand. Also this segment requires value for money, best features and customer friendly vehicles.

Yasodha Damodaran and Dr. Kumudha,(2015)[5]in their study discussed" Customers' Perception Towards TATA Nano car in Coimbatore" To them the Indian automobile industry is the tenth largest in the world with an annual production of two million units. TATA Motors dominates over 60 per cent of the Indian commercial vehicle market. TATA Motors are the largest medium and heavy commercial vehicle manufacturers in India. This study would be useful for companies to know the acceptance level of TATA Nano by its customers. It would be also useful for companies to form strategies according to perception of people about TATA Nano. This study is based on data collected from fifty customers of TATA Nano car confined to Coimbatore city. Primary data was collected by using a structured questionnaire. The main factor that attracted and influenced the purchase decision of TATA Nano is its price. The study on perception of customers on Tata Nano car also gives an insight on the acceptance level of the respondents towards Tata Nano car.

Jamuna.S and Bharathiraja,(2015)[6]in their study entitled "A Study on Customer Satisfaction towards Tata Nano in Trichy City" analysed on the awareness of TATA Nano cars among the customers. A sample survey of 110 respondents was undertaken to find out the awareness of TATA Nano cars in Trichy city. The study mainly concentrated on general applications, general awareness, advantages and consumer preferences of TATA Nano cars.

THE FACTORS INFLUENCING TO PREFER TATA NANO CAR

The paper has thrown light on various factors influencing the buyer to prefer TATA Nano car. It is known that most of the respondents prefer Luxury LX car model, Summer Blue colour, with air-conditioning facility.

More over they prefer petrol car, for its long drive. The car is convenient for self driven and the price is affordable. They searched information before the purchase of TATA Nano car, and discussed with the family about the car.

Before purchase of TATA Nano car, they used public transport and they feel city roads are congested. They attend religious and communal functions by taxies before owning TATA Nano car and they use TATA Nano car to go to work. The information they collect from various sources before the purchase of the car helped them well and the impact of road show of TATA Nano car creates a positive mind towards buying the car.

THE REASONS FOR PREFERRRING TATA NANO CAR

The various reasons for preferring TATA Nano car among the buyers. Comforts and cost factor mainly influenced to prefer TATA Nano car in the study area. It is concluded that "Comfort and Cost" is an important factor which has an impact on motivating the buyers towards the purchase of TATA Nano car. The respondents enumerate that TATA Nano car is useful for hill climbing, high ground clearance easy to drive in traffic and high mileage, and these are the factors which lead a major part of preferring TATA Nano cars. The attitude of preferring TATA Nano car among the buyers are after sales service and breaks for safe driving. The purpose of preferring TATA Nano car is productivity and safety in driving.

SUGGESTIONS

1. It is suggested by the researcher to the TATA Motors that TATA Nano cars while on road make a lot of noise pollution and the engines should be controlled by fitting new turbo chargers.
2. Engine vibration and enormous heat generation during long drive on road have to be avoided and suitable remedy and rectification for healthy engine should be considered for TATA Nano car.
3. When the car is under repair the inner spare parts could be replaced easily, with more technology. Further, repair charges should also be normal and economic so that the maintenance of car could be easy. This should not result in the TATA Nano cars as a burden.
4. TATA Motors may provide facilities such as more luggage space, foot rest, good ventilation inside TATA Nanocar.
5. The respondent prefers enhanced features from TATA Motors such as anti-lock brake system, power steering system and aero-dynamic design.
6. The buyers insists that TATA Motors canadopt new technology to upgrade the electrical and air- condition system.
7. The major expectation of TATA Nano car buyer to TATA Motors management is that the reduction in the price of the car and the improvisation in the mileage of the car.

CONCLUSION

Twenty first century has ushered in a mass production and marketing of Indian cars. India has improved technologically in production, assembling and export of cars. The major reason for this growth is collaboration with foreign countries, application of latest technology and adoption of government industrial policies. The government of India introduced Golden Quadrilateral network of high ways from Kanyakumari to Jammu Tawi and it is a boon for tourist, travelers and movement of goods. Due to increase in population, the office goers, private company executives, traders have been multiplied, the demand for private transportation is also increasing. As a result, the demand for automobile is also steadily growing. Indian market has produced high rated and high powered cars for all the segments of the buyers. But the TATA Motors only introduced “Peoples Car”, TATA Nano car for the middle class buyers. The researcher has taken up efforts to study the low budgeted TATA Nano car in and around Dindigul district. The study concludes that TATA Nano car is suitable for middle class buyers because of its economically affordable price. The introduction of Electric, CNG and Diesel version by the TATA Motors will open up new markets for TATA Nano car.

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ANALYZING PUBLIC HEALTH EXPENDITURE UNDER NRHM IN LOW AND HIGH PERFORMING STATES

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ABSTRACT

The paper focuses on the differences in the release, allocation and utilization of NRHM funds for low and high performing states. Under NRHM, center committed to increase their share in public health expenditure by transfering more funds to states and the states were also required to increase their level of spending on health care.The correlation between increased public health expenditure and better health outcomes is well established in the literature but at the same time it is recognized that the funds should be used efficiently to have an impact on health outcomes. The paper highlights that low performing states (Madhya Pradesh and Uttar Pradesh) were utilizing only about 70% of the funds released in the initial years (2005-07) while high performing states (Kerala and Tamil Nadu) were utilizing almost 100% of the funds. Higher utilization ratios are suggestive of better administrative capacity of the State's public health department. The study suggests that merely increasing funds for low-performing States is of no help, unless issues like lack of infrastructure, lack of skilled manpower and poor administrative capacity of States are resolved.

Keywords: Health Expenditure, NRHM, absorptive capacity, utilization of NRHM funds, spending pattern.

13.INTRODUCTION

India has made significant progress in reducing its IMR from 80 in the year 1990 to 42 in the year 2012 (MoHFW 2015), but these aggregate figures hide the variation in the performance level of different states (Bajpai, Sachs and Dholakia 2010). Within India there are wide inter-state disparities in health outcomes which are attributed to differences in economic development and endowments (Rao 2015). The figure 1 highlights the differences in states with respect to IMR, MMR and under-five mortality. Madhya Pradesh and Uttar Pradesh are among the states having highest mortality rates while Kerala and Tamil Nadu are among the lowest. With the realization of inter-state differences in terms of wealth, socio-economic and health indicators, MoHFW follows equity based approach for resource allocation to various states (MoHFW 2014). Under this approach, the allocation is made on the basis of population of the states and the respective weightage assigned to the group of states, North-Eastern high-focus states have been assigned a weightage of 3.2, Empowerd Action Group States have weightage of 1.3 and the same for other non-focus states is 1. The weightage has been assigned based on the level of assistance a state requires in achieving its health goals. The states have been grouped as high-focus, non high focus and North-East High focus states. The high focus states are Bihar, Chattisgarh, Himachal Pradesh, Jharkhand, J&K, Madhya Pradesh, Orissa, Rajasthan, Uttarakhand and Uttar Pradesh. The North-Eastern high focus states are Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim and Tripura and Non-Focus Large states are Andhra Pradesh, Goa, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, West Bengal. Financial allocations under the National Rural Health Mission are based on Programme Implementation Plans (PIPs), which are prepared by State Governments and are subject to approval by the Union Government (Planning Commission 2012).

However, literature highlights that the release of funds for high-focus states was decreasing over time (Berman et al. 2010). This was attributed to low absorptive capacity of the states and their lack of administrative capacities to ensure timely release of the funds. This requires further analyses, to understand the reasons for decreasing allocations to focus States. The study analyses allocation, release and utilization of funds under NRHM for two focus and two non-focus States.

14.METHODOLOGY

The study utilizes secondary data available online or presented in reports related to public health expenditure by center and states. The inter-state differences in high focus (Madhya Pradesh and Uttar Pradesh) and non high focus states (Kerala and Tamil Nadu) have been analyzed in terms of release, allocation and utilization of NRHM funds. The R-A (Release to Allocation) ratio and E-A (Expenditure to Release) ratios have been compared across these four states. The RA ratio is the release as percentage of allocation to state by the center and EA is the expenditure or utilization by the state as percentage of the funds released to the states. Further, the allocations of state health expenditure with respect to medical and public health and family welfare expenditure have been analzyed.

2.1 Data Sources

Data on Public Health Expenditre and NRHM Allocations and Release

- Outcome budget for various years available on website of MoHFW (http://www.mohfw.nic.in/WriteReadData/c08032016/6_CH_II_Financial_Outlays_Out.pdf)
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15.RESULTS & DISCUSSION

3.1 Inter-state differences in the allocation of NRHM funds

Figure 2 depicts that the amount allocated to high-focus states (Madhya Pradesh and Uttar Pradesh) are higher as compared to non-high focus states over the years. This difference in allocation between focus and non-focus states is based on the equity principle of fund allocation under NRHM (MoHFW 2014). However, the whole equity principle fails as the amount released as a percentage of allocated funds is lower in the focus states (poorly performing States) when compared to non-focus states. The initial allocations under NRHM are based on the equity principle, however, in later years the allocations are made based on the funds utilized by the State. Thus, it is important to look at Release-Allocation and Allocation-Utilization ratios to compare the states in terms of their absorptive capacity and administrative capacity. The next section discusses the same.

3.2 Inter-state differences in the release of NRHM funds

As can be seen in the table1, release as percent of allocations is low over the years for low performing states, Madhya Pradesh and Uttar Pradesh, when comapred to Kerala and Tamil Nadu. There are fluctuations in the RA (Release-Allocation) ratio which may be due to untimely release of funds (Planning Commission 2012). It has been found that sometimes even the high performing states are not able to utilize hundred percent of their funds as most of the funds are released by center in the quarter 4. Thus, the differences in RA ratios over the years and across states can be due to delay in release of funds from the center or due to delay in submission of utilization certifcate from states. Studies report that low performing states lack in adminditrative and absorptive capacity to utilize the funds thus the reason for their lower RA is poor capacity and capability of the states in managing the funds (Berman and Ahuja 2008).

3.3 Inter-state differences in the utilization of NRHM funds

Table 2, shows the expenditure-release (ER) ratio trends for the four selected states. It can be seen that Kerala and Tamil Nadu have constantly expended greater amount of funds as compared to Madhya Pradesh and Uttar Pradesh. Though initially Uttar Pradesh and Madhya Pradesh ER ratio was less than 80% but over the years it has improved. The ER ratio for later years is more than 100% for all the four states. The expenditure becomes more than 100% as states spend the pending amounts of previous years. It points to the improvement in absorptive capacity of the states.

3.4 Discussion

Under NRHM states have to fulfill some requirements to ensure timely release of funds. To receive funds from the center state has to fulfill following financial management indicators:

- Send financial reports and audit reports
- Utilization certificates
- Progress report in achieving institutional process targets

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These are some of the requirements mentioned there may be many other as well. In case a state fails to either utilize the funds and consequently is unable to submit utilization certificates, center would not relase the funds as per the standard guidelines. Low performing states lack administrative capacity to manage all the reports on time and thus their RA ratio (Release to Allocation) is less as compared to high performing states. Further, over time RA ratio is affected by low absorptive capacity of states as they fail to utilize allocated funds and finance ministry doesn't release more funds due to non-submission of utilization certificates (Narwal 2014).

Berman et al. (2010) analyzed NRHM expenditure for the three group of states for the period 2005-2008 and found that release as a percent of allocations have declined over time in Group A states (focus states including Madhya Pradesh and Uttar Pradesh). The RA ratios for Kerala and Tamil Nadu have been constantly high signifying better utilization capacities and better knowledge of the requirements to be fulfilled for ensuring fund release on time. Though there has been increase in the RA ratios for low performin states in the recent years. This is the result of increased utilization of funds in these states as can be seen from Expenditure-Release ratio for these states in the years 2014-15.

CBGA (2011) notes that the financial allocations under NRHM are not need based as the conditionalities that have to be fulfilled for getting funds from the center affect the low perfroming states states as they fail to utilize their funds due to capacity constraints. The constraints in fund utilization have been identified from both the supply side, like lack of infrastructure, limited managerial and administrative capacities to plan and implement a program and the demand side, like lack of education, infromation and other social factors that may affect the effective demand (Berman and Ahuja 2008, Duggal 2009, Berman et al. 2010).

The discussion suggests that merely increasing funds for poorly performing States is of no help, unless issues like lack of infrastructure, limited managerial capacity and lack of skilled manpower are resolved.

16.FIGURES AND TABLES

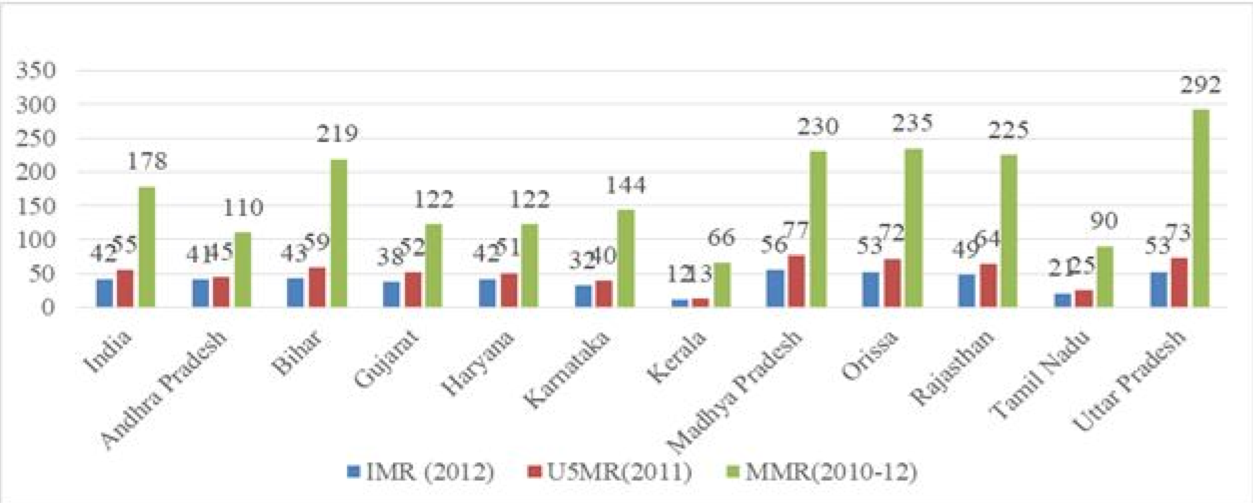

Figure-1: Mortality Rates Across Selected States. Source: Based on data from Registrar General of India (2013) SRS bulleitein.

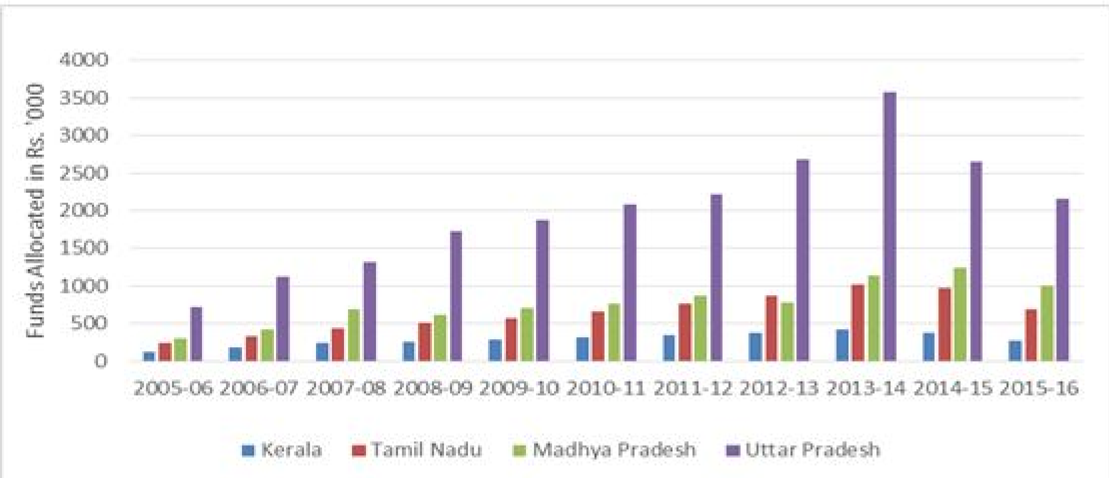

Figure-2: Trends in Allocation of NRHM funds ('000 Rs.)

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RA ratio	Madhya Pradesh	Uttar Pradesh	Kerala	Tamil Nadu
2005-06	87.67497	109.35262	92.34899	105.32914
2006-07	99.41917	79.168142	87.06153	98.764846
2007-08	89.43325	94.996226	124.2809	127.02766
2008-09	115.9206	85.402432	87.85489	97.265852
2009-10	85.57665	106.47721	83.57369	112.39887
2010-11	103.4028	105.40645	82.11277	106.39491
2011-12	76.82591	83.79946	168.645	101.24118
2012-13	97.84836	83.6946	129.3513	109.2407
2013-14	75.81069	84.391741	85.09785	88.843137
2014-15	92.96	91.739623	139.6949	98.399091
2015-16	107.8235	129.83349	104.1805	144.39396

Table-1: Release-to- Allocation Ratios 2005-06 to 2016-16.

Source: Author's calculation based on data from Quarterly NRHM MIS report March 2016.

Data for Madhya Pradesh and Uttar Pradesh taken from report of High Focus States – Non-NE states

Data for Kerala and Tamil Nadu taken from report of Non High Focus States – Large

Years	Madhya Pradesh	Uttar Pradesh	Kerala	Tamil Nadu
2005-06	70.7	72.2	93.2	82.1
2006-07	86.0	78.7	92.1	96.7
2007-08	104.7	76.0	83.1	71.8
2008-09	97.2	104.8	148.7	106.5
2009-10	122.7	112.3	162.1	108.3
2010-11	127.1	122.9	152.3	117.5
2011-12	99.9	107.9	73.5	118.4
2012-13	158.5	145.2	128.1	95.0
2013-14	177.8	96.7	186.5	157.8
2014-15	149.6	151.0	97.7	236.0
2015-16	187.0	137.5	183.2	146.7

Table-2: Expenditure-Release Ratio from 2005-05 to 2015-16. Source: Based on data from Quarterly NRHM MIS report March 2016.

17.CONCLUSION

The analysis on inter-state differences in the release and utilization of funds points to the low absorptive capacity of the low performing states as well as untimely release of funds (releasing major proportion in quarter 4). As identified by earlier studies as well there is a need to improve the managerial and administrative capacities of low performing states so that they can better utilize the funds and consequently the release ratios would improve. The study highlights that merely increasing the funds for poorly performing States is of no help, unless issues like lack of infrastructure, limited managerial capacity and lack of skilled manpower are resolved.

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A REVIEW ON ECONOMIC IMPACT OF GUJARAT TOURISM POLICIES ON GUJARAT TOURISM

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ABSTRACT
There is an enormous impact of travel and tourism on economic across the world as well as India. In the current economic scenario of the globalized world, tourism has proved to be successful for the year 2015. This paper studies the various tourism policy adopted by Gujarat Tourism and its economic impact. Gujarat is booming sector and the Government of Gujarat has introduced the New Tourism policy 2015-20, which highlights the innovative practices adopted by Gujarat government to make Gujarat a top 5 tourist destination. The paper studies various policies like various subsidies provided, various schemes for innovation and sustainability of tourism, innovation policies as well as skill development. The paper also studies the impact of tourism on various aspects increase in the tourists from various regions, increase in employment generated and the contribution of tourism industry to the growth of GDP.

Keywords: Economic Impact, Gujarat tourism, Tourism Policies, Tourism.

INTRODUCTION
Tourism industry is a promising industry. The industry has been growing not only in India but in the entire world. There are a numerous un-conventional destinations grown apart on the most loved destinations of Europe and America. There is a huge growth on a lot of specific tours like: adventure tourism, medical tourism, solo tourism as well as spiritual tourism. This has opened a lot of opportunities in terms of investment and employment. This has resulted into economic growth of those specific areas. It has also contributed in increase in foreign exchange as well as development of tourism infrastructure.

In India tourism industry can also impact various industries like banking, infrastructure, transport, agriculture and health. On the occasion of World Tourism Day, 27th September 2015, Gujarat government disclosed an ambitious new tourism policy 2015-2020 and awarded ‘industry status’ to the tourism sector for the first time. The main objective of the policy is to make Gujarat one of the top five tourist States of India in terms of local, national and international tourist arrivals by 2025

LITERATURE REVIEW
A lot of studies and research has been done by on the impact of tourism on the economy. Tourism is evidently a large industry with potential for growth. Rising income also has increased the demand for environmental amenities (Randall 1987).

Eadington and Smith 1992, Roxe 1998 suggests that, though publicized as a low-impact alternative to traditional tourism, ecotourism has been called “responsible travel that conserves natural environments and sustains the wellbeing of local cultures” (Ecotourism Society in Wheat l998:10).

Sirakaya and McLellan 1998 stated that the purposes of ecotourism are to raise the public’s awareness of the environment, to sensitize travellers to nature and its - processes, and to reduce negative impacts of human activities on natural areas.

Raval, H. R. (2015) in his paper studies selected plans of Gujarat government for the development of tourism investigated that tourism is interlinked sector, its study becomes more complicated and complex because observations of impacts may not be exact or much accurate. Therefore, this study still leaves room for further study. From the perception of state, government can identify more effective programs; recognize limitations of past programs and guidelines for future action plans. Even it may be useful for the people who want to attempt for studies of similar nature.

Shukla, P. K. (2014) in his research work on ‘A study of tourism in Gujarat a geographical perspective’ stated that out of the 10 motivational factors such as business, leisure, entertainment/sports/pleasure, cultural/festivals/fairs, personal/medical/wedding, religious, educational, conventional, shopping and sightseeing, foreign tourist preferred cultural/festivals/fairs the most by 30%, 20% preferred Entertainment/sports/pleasure whereas only 2% preferred business related travel to Gujarat.

Dixon and Shennan, 1991 in his research paper suggested that recreation is one of the benefits of protecting natural areas along with habitat protection, biodiversity preservation, soil formation, nutrient recycling, and control of water and air pollution.

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Heywood and Watson 1995, Perrings 1995, Tumer et al. 1995 concluded that protected areas can provide resilience and stability in ecosystems and maintain numerous natural services. Weisbrod 1964, Knltilla 1967, Dixon and Sherman 1991 added that the values of amenities must be weighed when considering actions that affect the conservation of natural areas.

Bhattacharya, M. (2008) suggested advantage Gujarat in Medical Tourism. Conference on Tourism in India – Challenges Ahead remarked that Medical facilities in Gujarat is well developed with world class health infrastructure, zero waiting time and most importantly one tenth of medical costs spent in the US or UK, Gujarat is evolving into a preferred medical tourist destination.

OBJECTIVE OF THE STUDY

The research paper is written with the following objectives

- To study the innovative policies and practices undertaken by Gujarat Tourism to promote tourism in Gujarat
- To study the economic impact of these policies on the growth of Gujarat Tourism.

METHODOLOGY

The paper is based on secondary research. Government websites and research papers, articles, journals were referred to study the various tourism policies undertaken by Gujarat Tourism. Various websites were studies to find the economic impact of policies on Gujarat Tourism.

TOURISM POLICY IN GUJARAT

The Tourism Policy of Gujarat came into force from 2015 shall remain in force till 31stMarch 2020 or till the declaration of a new or revised Policy, whichever is earlier. The Policy is applicable to the whole of the State of Gujarat.

The various polices covered under it are

CAPITAL SUBSIDY TO THE ELIGIBLE TOURISM UNITS

The quantum of the capital Investment Subsidy is as follows:

Eligible Capital Investment (excluding the land cost)	(excluding the land cost) Admissible Subsidy	Maximum Limit
Investment upto Rs.50 crore	15%	Rs. 7.50 crore
Investment above Rs. 50 crore	15%	Rs. 10 crore
Tented accommodation (with minimum investment of Rs.0.20 crore)	20%	Rs. 0.15 crore
Equipment worth Rs.1 crore and above for Adventure & Water Sports and Golf Equipment for Public Golf Courses registered with TCGL	10%	Rs. 0.50 crore

An addition subsidy of 5% is given for some specified purposes and areas.

An interest Subsidy to eligible tourism units is given @5% of the Loan Amount with maximum amount of Rs.25 lakhs per annum for a period of five years in Municipal Corporation areas for eligible tourism units ; @7% of the Loan Amount with maximum amount of Rs.30 lakhs per annum for a period of five years in the areas other than mentioned above ; For Heritage hotels @7% of the loan amount with maximum amount of Rs.30 lakhs per annum for a period of five years.

Other Subsidies Include Stamp Duty Concession, Exemption from Luxury Tax, Exemption from Entertainment Tax, Exemption from Electricity Duty. Also, there is a support to Sustainable Tourism in the way of assistance extended to eligible tourism units up to 75% of the cost of carrying out Energy Audit by a recognized institution/consultant, Water Harvesting / Conservation and Environment-friendly practices like Green Buildings, Solar and other Renewable Energy measures, to a maximum token amount of Rs 50,000 per unit.

The State Government duly promotes and facilitates Mega Tourism Projects that have a large multiplier effect on the economy, leading to employment generation and inclusive growth in the State. Any type of Mega Tourism Units like Theme Parks, Amusement Parks, Water Parks, etc. meeting the qualifying criteria of Mega Tourism Units is eligible for extra benefits.

The Policy proposes to give a fillip to innovation by providing an incentive on the commissioning of the project which should meet any one of the criteria as: Technologically introduced first time in the State; Significant leveraging of Information Technology; Having negligible carbon footprint.

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There are a number of policies in the areas of for Support for Marketing and Promotion; Skill Development; Incentives for ICT Enablement; Assistance for Research in the Tourism / Hospitality Industry. A part of these initiatives, a lot of initiatives are taken in terms of Development of Wayside Amenities, PPP in Tourism Projects, Home-stay Policy, Tourist Police, Development Regulations for Hotels, Excellence Awards.

IMPACT OF THE POLICIES ON TOURISM

In Gujarat, the arrivals of tourists have been increasing. The tourists are diverse and vary across all the age group. Also there is an increase in the local tourists as well as tourists across the nation. Also, there has been an increase in foreign and NRI tourists.

The tourists' arrival trend in the past 10 years is shown as follows.

TOURISTS ARRIVAL TRENDS

(No. in lacs)

Year	Within Gujarat	Other States	Foreign/NRI	Total Tourists	Growth(%)YoY
2006-07	95.96	25.4	2.07	123.43	-
2007-08	111.28	27.66	2.29	141.23	14.42
2008-09	122.85	32.27	2.95	158.08	11.93
2009-10	130.77	36.24	3.1	170.11	7.61
2010-11	150.62	43.55	3.95	198.12	16.47
2011-12	171.76	47.28	4.6	223.64	12.88
2012-13	195.36	53.56	5.17	254.09	13.62
2013-14	221.61	60.61	5.66	287.88	13.30
2014-15	245.94	74.63	6.33	326.91	13.56
2015-16	218.80	93.99	7.33	383.12	17.19
2016-17	324.00	114.76	9.24	448.00	16.94

Source: GICTO- Gujarat Industrial and Technical Consultancy Organization Limited

As we can see in the table, the growth of tourism in Gujarat is rising steadily. There are various reasons of the growth in tourism. One of the reasons is Vibrant Gujarat. Vibrant Gujarat provides a platform for investors to analyse and explore investment policies in Gujarat. This is one of the main reasons for increase in foreign tourists. 'Khusboo Gujarat Ki' Campaign another such initiative taken by the government of Gujarat. These initiatives along with many innovative schemes have boosted the tourism industry of Gujarat. The tourism has a tremendous economic impact on economy of Gujarat.

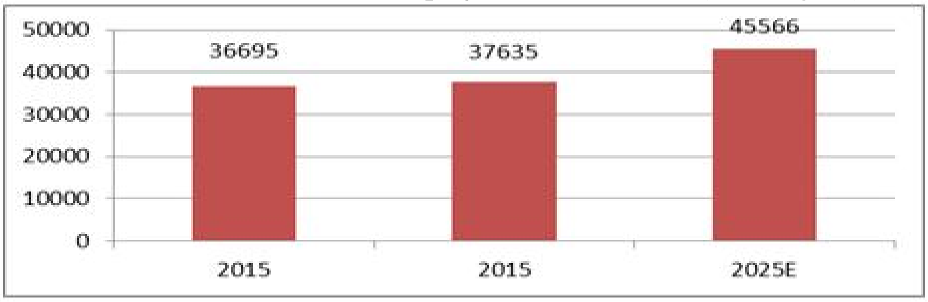
PURPOSE OF TOURISM

The GITCO report-2014 stated that, 4, 34,114 tourists in Gujarat visited for Business purpose, 51,509 visited for religious purpose, 15,704 visited for leisure centres by NRI and foreigners. In all there were 6, 33, 395 visitors in 2014. Gujarat tourism includes spiritual tourism which includes destinations like Dwarka Temple, Somnath Temple, Ambaji Temple and Palitana. Tourism to heritage and architectural sites include Rani ki vav, Adalaj ni vav, Modhera Sun Temple and Idar. Beaches include Mandvi, Chorwad, Tithal and Sabarmati Riverfront. Natural Ecosystem tourism includes Gir National Park, NAl sarovar bird century, veravadal black buck park and little rann of kutch.

CONTRIBUTION TO EMPLOYMENT

Tourism industry has tremendous potential to create employment opportunities. Table-2 shows the employment generation and expected employment generation by the tourism sector in Gujarat.

Table-2: Contribution to Employment Generation (in '000 jobs)



Source: GICTO- Gujarat Industrial and Technical Consultancy Organization Limited

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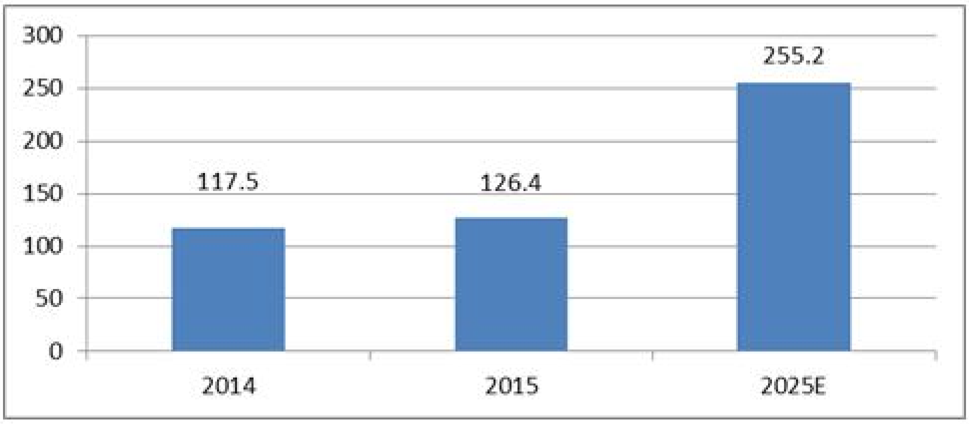
The data collected by World Travel and Tourism Council indicates that tourism industry in Gujarat is increasing employment. The employment has rose by 8.7% in 2015 and is expected to rise further by 9% till 2025. The employment has been increased directly is tourism industry as well as in the allied industry.

INCREASE IN GDP

The report on Economic Impact-2015 of World Travel and Tourism Council concluded that 9.8% of the World GDP was contributed by tourism. The share of tourism to India's GDP was 6.07% and Gujarat Tourism contributed 6.7% to state GDP in 2014. In 2015, the contribution of tourism industry in the world was 10.5%, while the share in India was 7.6% and the contribution of tourism industry in Gujarat was 6.8% and is expected to grow by 10% till 2025. The following table shows the contribution of tourism industry of Gujarat in the overall GDP of Gujarat.

Table-3: Contribution to GDP (USD Million)



Source: GICTO- Gujarat Industrial and Technical Consultancy Organization Limited

The above table clearly shows that the contribution of tourism industry in Gujarat cannot be ignored. With the ambition to have around 10% of GDP contribution through tourism, the tourism policy would definitely help.

CONCLUSION

Through the review of the secondary data collected to analyse the impact of tourism policy on Gujarat tourism, we can conclude that that there are many innovative practices adopted by the Government of Gujarat to make improvement in attracting tourist from Gujarat, the nation, NRI as well as foreign tourists. This has helped in creating higher employment opportunities for local residents directly as well as in the allied industries. The tourism industry also has created a higher investment in infrastructure. Most importantly, the increase in the tourist has been more than 16% and is increasing. Also the contribution of tourism industry in the GDP has been 6.7% and is expected to grow. This indicates that the tourism has a potential of growth.

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A STUDY ON CRITICAL ANALYSIS OF PRIME MINISTER MUDRA YOJANA IN THE STATE OF MAHARASHTRA

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ABSTRACT

As per report by Asian Development Bank, India will continue to be the world's fastest growing major economy with 7.3 per cent growth rate in 2018-19 and an estimate of 7.6 per cent in 2019-20. Still majority of Indian population depends on micro and small scale businesses as a source of their income generation. Most of the micro and small businesses hinge on indigenous moneylenders from unorganised sectors for small business loans and other credit facilities which have exorbitant interest rates and insupportable terms and conditions. Hence, it is very important for the government of India to frame an economic policy for sustainable and inclusive growth. One of the initiatives taken in this regard by the Government of India is Pradhan Mantri Mudra Yojana. PMMY plays a vital role in attaining the triumph of financial inclusion. PMMY was inaugurated by the Prime Minister Mr. Narendra Modi in the year 2015 with the slogan "Fund the Unfunded" for facilitating micro credit up to Rs.10 lakh to the non-corporate, non-farm small/micro enterprises. Nonetheless, at the nascent stage the scheme revealed substantial attention but decelerated in long standing. The paper aims at critical analysis of performance of PMMY in whole of India and also brings out the performance of the different schemes under PMMY in the state of Maharashtra. The critical analysis of all schemes is done through trend forecasting. The analysis discloses that people are getting stimulated to cultivate entrepreneurship by starting their own work, if given a strong financial support. It reveals the performance of PMMY over three financial years. The study will be useful to devise the program that caters to real time need of the entrepreneurs.

Keywords: Micro Finance, Financial inclusion

INTRODUCTION

The Micro and Small Businesses contributes a large share of industrial units. Large number of local and international value chains are fed by Non Corporate Small Business Sector (NCSBS). The total value addition of this sector is 6.28 lakh crore p.a. Focusing on this sector will help in improving the quality of life of these entrepreneurs and also contribute noticeably to employment creation in the country thus attaining higher GDP growth.

The major problems faced by the numerous micro and small enterprises are getting financial support, filling Infrastructural gaps, low growth placement, Absence of Market Development / Market Making, access to entry Level technologies etc. A major part of the NCSB Sector functions as non-registered entities. They don't retain appropriate Books of Accounts and are not legally shielded under taxation laws. Hence, the banks find it challenging to offer them credit facilities. Moreover, majority of this sector does not access external sources of finance.

In this form of unorganised and non-registered environment the Government of India (GoI) set up the Micro Units Development & Refinance Agency Ltd (MUDRA). This primary responsibility of this agency is developing and refinancing Micro-enterprises sector by assisting the financial institutions rendering business of offering credit facilities to micro / small business enterprises engaged in manufacturing, trading and service activities. MUDRA collaborates with different Banks, Micro Finance Institutions and other financial institutions at state and regional level to offer micro finance funding to the micro enterprise sector in India.

On 08th April, 2015 Pradhan Mantri Mudra Yojana (PMMY) was inaugurated along with Micro Units Development & Refinance Agency Ltd (MUDRA) and the comprehensive guidelines were circulated by Government of India to all Banks, Micro Finance Institutions and other financial institutions. MUDRA was given the prime responsibility of observing the entire programme by gathering the required information regularly. Consequently, MUDRA has placed a special monitoring portal which captures the information on loaning under PMMY, in detail.

OBJECTIVES OF THE STUDY

1) To assess the role of Pradhan Mantri Mudra Yojana in whole of India
2) To evaluate the performance of Pradhan Mantri Mudra Yojana the state of Maharashtra.

RESEARCH METHODOLOGY

The nature of study is analytical, based on secondary data. The period of study undertaken is three financial years starting from 2015-16 to 2017-18. Provisional data of 2018-19 is also used for the study. Data analysis and interpretation is done through graphic presentation and trend forecasting.

SCOPE OF THE STUDY

The study brings out the performance of PMMY as whole and explicitly in the state of Maharashtra and also reveals the efforts of Government of India to make it more operative. It showcases various characteristics of the scheme designed for sustainable and inclusive growth. It highlights how PMMY had facilitated the young educated and skilled minds to come up for entrepreneurial undertakings.

The study will focus the performance of the offered schemes which may assist financial institutions to develop custom made programs and financial products considering the socio demographic, psychological and economic factors.

PRADHAN MANTRI MUDRA YOJANA (PMMY)

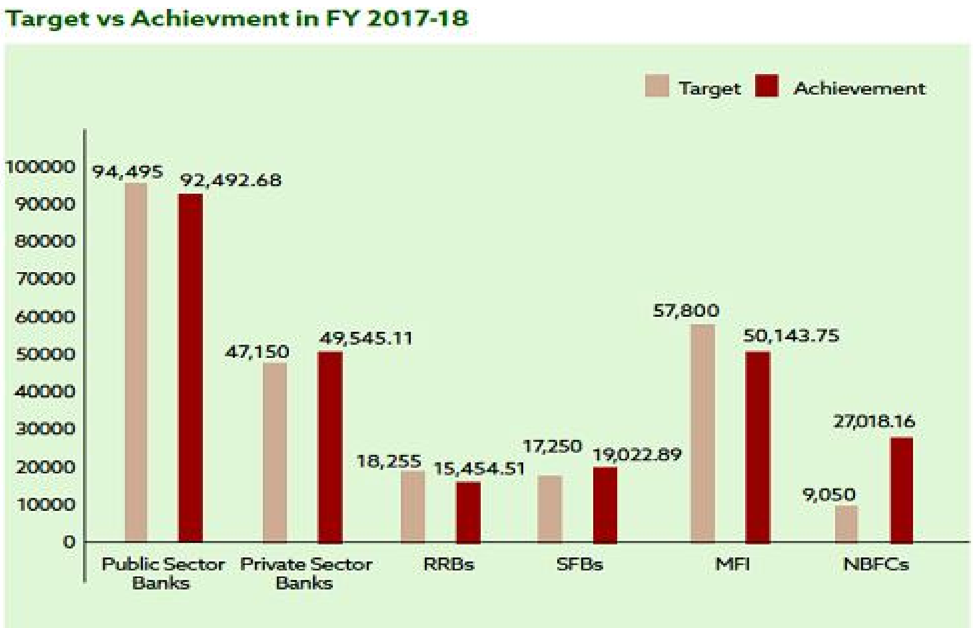
Micro Small and Medium Enterprises sector is the fastest growing sector in India and assures an extraordinary progression potential for the Indian economy. Close to 117 Million People are employed in around 51 million MSME operational units across the country, constituting 40% of the total workforce. The MSME sector contribution to the total non-agricultural Gross Domestic Product (GDP) is approximately 37% . Exports contribution is 43% of the entire exports. The MSME sector continues to be considerably under- penetrated on the organised lending front. As per MSME Pulse report published by Transunion CIBIL and SIDBI (March 2018), formal credit access is available to only 10% units out of the 51 million MSME units.

MUDRA has successfully completed three years of offering refinance to a wide-ranging Financial Institutions such as Commercial Banks, RRBs, Small Finance Banks, Non Banking Financial Companies, Micro Finance Institutes etc. The refinance facility is extended to institutions involved in providing financial assistance to micro enterprises. MUDRA extends credit facilities to money making micro enterprises involved in manufacturing, processing, services, trading and activities allied to agriculture. The lending facility is available up to Rs.10 lakh. The schemes under MUDRA have been named 'Shishu', 'Kishor' and 'Tarun' depending upon the stage of growth / development and funding requirements of the recipient micro unit / entrepreneur. The details of these schemes are as under:

- Shishu Scheme : Offering loans up to 50,000/-
- Kishor Scheme: Offering loans above 50,001/- and upto 5 lakh
- Tarun Scheme: Offering loans above 5 lakh and up to 10 lakh

The data collected through the portal has been studied intensely and some of the significant aspects are as under:

1. Agency wise Targets and Achievements



The target set for loan sanction under PMMY in FY 2017-18 was 2.44 lakh crore, which was dispersed among the banks, MFIs and NBFCs. The agency-wise performance against their overall target for the year is as under:

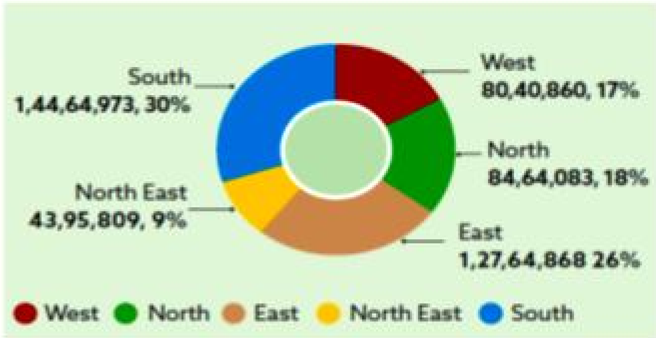
It shows that the agency wise target has been attained during the year 2017-18. As against the et target of 244000 crores, all agencies together have disbursed 253677.10 crores, thus achieving 104%. The published data shows a 41% growth over previous year (2016-17) in the overall performance of the programme by all the institutions. A remarkable credit growth have been achieved by NBFCs (396%) followed by SFBs (183%).

Source: www.mudra.org.in/Default/DownloadFile/Annual_Report_Of_Mudra_2017-18.pdf

2. Regional Coverage

State Name	No. of A/Cs 2017-18	Sanction Amt. 2017-18	No. of A/Cs 2016-17	Sanction Amt 2016-17	Growth(%) Sanction Amt.
North	84,64,083 (18%)	40,535.36 (16)	66,67,731 (17)	41,884.86 (23)	45%
East	1,27,64,868 (27)	48,744.32 (19)	1,28,38,524 (32)	43,115.35 (24)	13%
North East	43,95,809 (9%)	18,553.8 (7)	15,99,539 (4)	6,650.34 (4)	179%
South	1,44,64,973 (30)	76,259.92 (30)	1,14,20,144 (29)	52,876.65 (29)	44%
West	80,40,860 (17)	49,583.68 (20)	71,65,309 (18)	36,001.35 (20)	38%
	4,81,30,593	2,53,677.1	3,97,01,047	1,80,528.54	

Note: Figures in parenthesis indicate the share in percentage.



Source: www.mudra.org.in/Default/DownloadFile/Annual_Report_Of_Mudra_2017-18.pdf

From the scrutiny, it can be understood that in terms of number of accounts, East & NE region ranked highest, with nearly 35% of the total number of loan accounts approved, but their share in the total loan amount was only 27% which is lower than 30% of southern region. Western region's share in number of accounts and sanction amount is lowest.

3. State-wise Performance

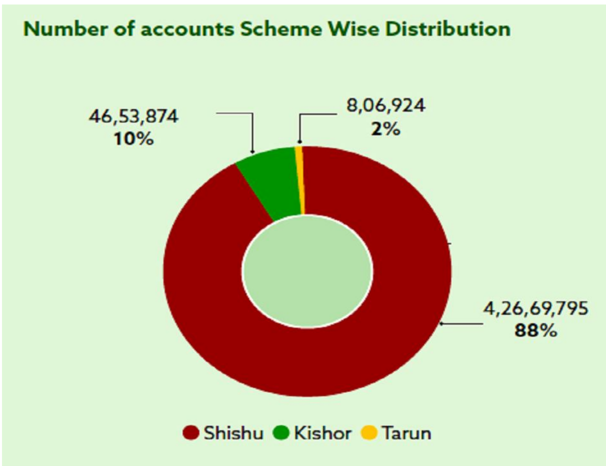
The Agency wise targets were further downsized state-wise by the corresponding banks on the basis of their network and prospective to offer loans. The state level performance was supervised by State Level Bankers Committee. Of all the States, Tamilnadu topped with Rs.25,331.68 crore sanction, followed by Karnataka with Rs.23,009.73 crore and Maharashtra stood third with Rs.22,751.40 crore.

1. Category wise analysis

Amongst the three categories, Shishu loan recorded the maximum share of 88.65% in terms of number of accounts and which was followed by Kishor. The share of Kishor loan accounts increased to 9.67% in 2017-18 matched to 6.71% in 2016-17. Share of Tarun loan also increased considerably.

(₹ in crore)

Category	No. of loan accounts (2017-18)	Sanction Amt. (2017-18)	Sanction Amt. (2016-17)	% change
Shishu	4,26,69,795 (88.65%)	1,06,001.6 (41.78%)	85,100.74 (47.13%)	24.56%
Kishor	46,53,874 (9.67%)	86,732.15 (34.19)	53,545.14 (29.66%)	61.97%
Tarun	8,06,924 (1.68%)	60,943.36 (24.02)	41,882.66 (23.20%)	45.50%
Total	4,81,30,593	2,53,677.11	1,80,528.54	



Source: www.mudra.org.in/Default/DownloadFile/Annual_Report_Of_Mudra_2017-18.pdf

2. Assistance to less privileged sections:

The share of less privileged categories of borrowers like Women, SC, ST, OBC, Minority and new loan accounts under different schemes of PMMY was also analysed. Women proved to be the major beneficiary of micro finance loans.

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(₹ in crore)

Category	SHISHU		KISHOR		TARUN		TOTAL	
	No Of A/Cs	Amount sanctioned	No Of A/Cs	Amount sanctioned	No Of A/Cs	Amount sanctioned	No Of A/Cs	Amount sanctioned
General	1,79,11,238	47,171.25	32,83,034	66,477.31	7,12,207	53,976.53	2,19,06,479 (45.51%)	167,625.09
SC	81,86,001	19,462.62	3,07,214	3,976.79	12,946	939	85,06,161 (17.67%)	24,378.41
ST	24,18,131	5,616.06	1,12,795	1,794.64	8,381	589.71	25,39,307 (5.28%)	8,000.41
OBC	1,41,54,425	33,751.67	9,50,831	14,483.42	73,390	5,438.1	1,51,78,646 (31.54%)	53,673.18
Total of the above	4,26,69,795	1,06,001.6	46,53,874	86,732.16	8,06,924	60,943.34	4,81,30,593	2,53,677.1
Woman	3,21,44,132	8,03,71.59	13,35,192	16,586.84	78,914	6,295.7	3,35,58,238 (69.72%)	1,03,254.12
New Loan Accounts	1,00,47,673	22,622.86	21,05,072	44,042.84	4,06,582	30,783.01	1,25,59,327 (26.09%)	97,448.7
Minority	46,97,008	12,319.63	5,20,750	7,826.62	52,337	3,945.53	52,70,095 (10.95%)	24,091.77

Note: Figures in parenthesis indicate the share in percentage.

Source: www.mudra.org.in/Default/DownloadFile/Annual_Report_Of_Mudra_2017-18.pdf

3. Disbursement through MUDRA card

In line with digitalisation of banking, A Rupay debit card is issued against working capital limits under PMMY. Roughly 5.17 lakh cards for 1,477 crore issued during 2015-16. 1.84 lakh cards for 1,564.61 crore during 2016-17 and 1.52 lakh cards for amount of 1,481.43 crore in 2017-18. Since the cards issued are applicable in the coming years also, the number of new cards issued in subsequent years appears to decline. However, there are over 8 Lakhs MUDRA Cards in use at the end of 2017-18.

4. NPA and PMMY

NPAs reported under PMMY is 5.38% as on March 31, 2018. It shows that MUDRA Loans remain generally less affected by growing number of bad loans in India.

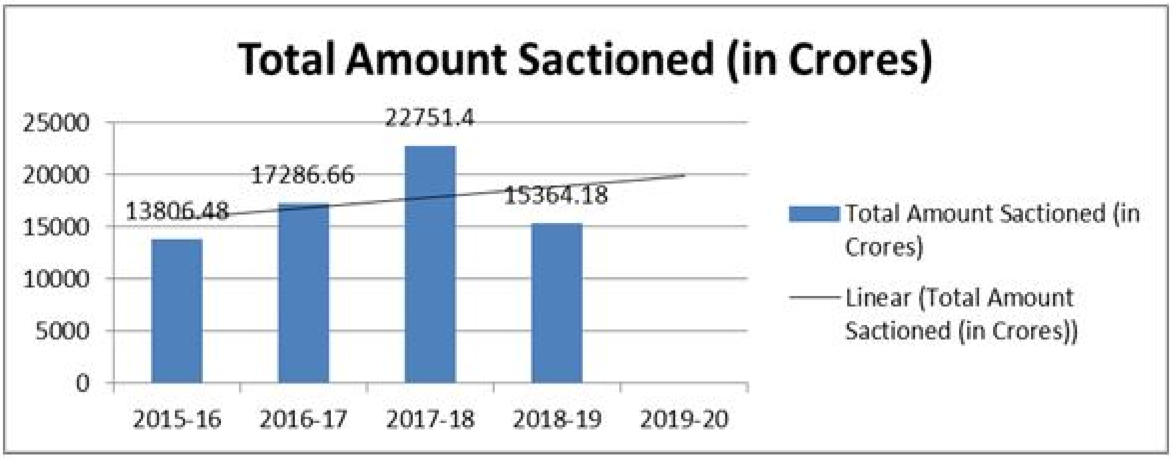
PERFORMANCE OF MUDRA YOJANA IN MAHARASHTRA

Given below is the performance of Mudra yojana in the state of Maharashtra Year wise:

As per the Annual Report of MUDRA 2017-18, in 2018-19 (Provisional) ,the total number of sanction is 2784369 which is higher than total number of sanction of 2017-18. It has recorded 254783 total sanctions. It is also found that disbursement of Shishu loan is higher than Kishor and Tarun. In 2015-16 under Shishu Category 326802 were sanctioned and for Kishor and Tarun 27554 and 5651 respectively. In 2015-16, banks had sanctioned 360007 applications which fell down to 286579 in 2016-17.

TREND ANALYSIS OF PERFORMANCE OF PMMY IN MAHARASHTRA

Figure-1: Total Amount of Loan Sanctioned



Source: Primary Source

Figure 1 analysis shows that Mudra scheme was started with force but has slowed down with the years it is found that total number of sanctions have dropped in Maharashtra and trend forecasting also reveal that it will go down further in years to come . it shows that in 2015 -16 the total amount sanctioned is 13806.48 crores and in current financial year provisional sanction is 15364.18. Successively it shows that there are chance of falling down of amount sanctioned for MUDRA loan in 2019-2020.

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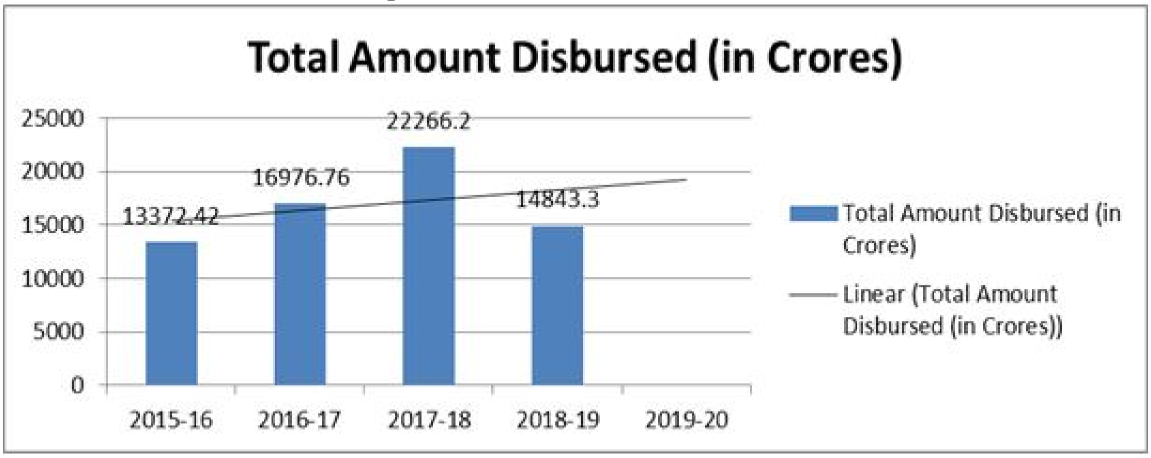
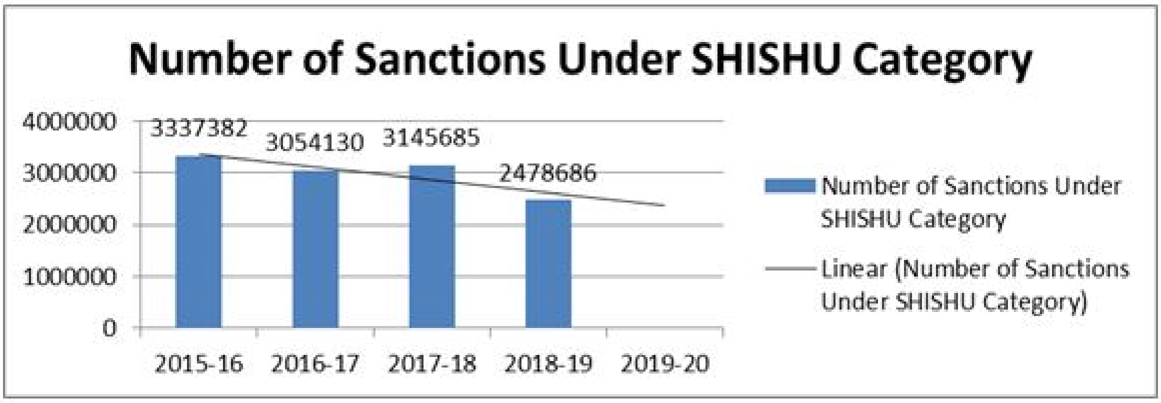
Figure 2 shows trend forecasting of amount disbursed in Maharashtra since 2015-16. It reveals an increase in total amount disbursed of amount in the state. There is a trend forecast that it will slightly increase in 2019-20 as well.

Figure 2: Total Amount Disbursed



Source: Primary Source

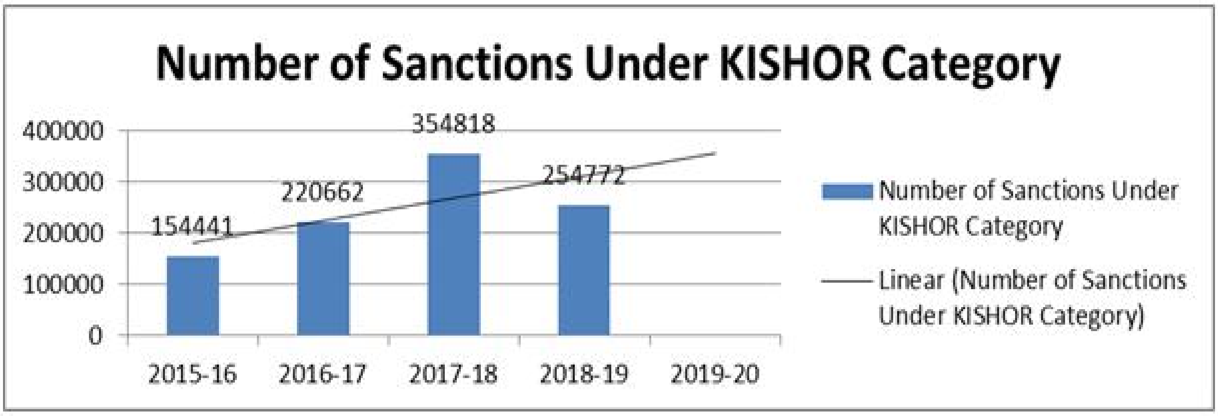
Figure 3: Number of Sanctioned Under Shishu Category



Source: Primary Source

Figure 3 represents trend forecasting of number of sanctioned application under Shishu category in Maharashtra since 2015-16 .The slope is negative. It reveals there is a drop in the number of sanctioned application in the state . Data used for 2018-19 is provisional .There is a trend forecast that it will go down in 2019-20 as well. This shows that performance of SHISHU Category of mudra yojana in Maharashtra has slowed which has various reasons.

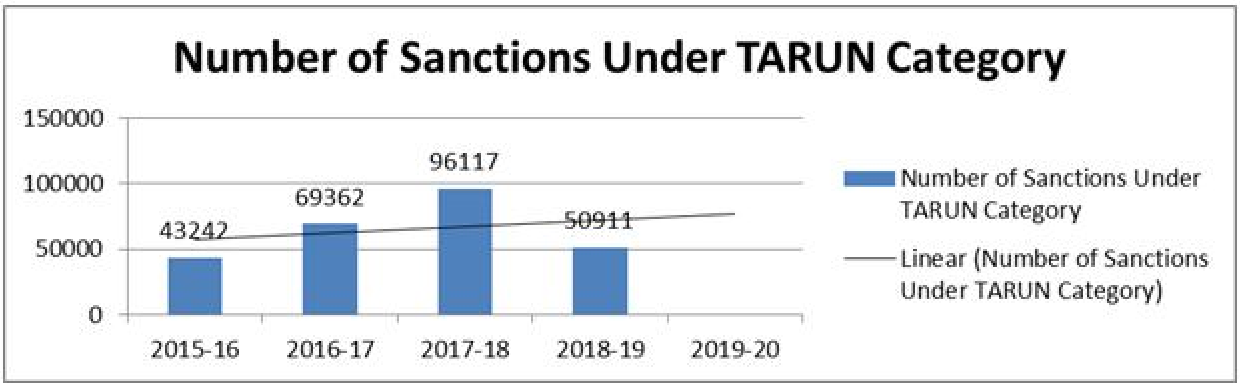
Figure 4: Number of Sanctions Under Kishor Category



Source: Primary Source

Figure 4 shows trend forecasting of number of sanctioned application under KISHOR category in Maharashtra since 2015-16. The slope is showing increasing trend although provisional data of current year 2018-19 shows a decrease .People are getting stimulated to borrow under kishor category

Figure 5: Number of Sanctions Under Tarun Category



Source: Primary Source

Figure 5 represents trend forecasting of number of sanctioned application under TARUN category in Maharashtra since 2015-16 .The slope is positive but at a decreasing rate due to provisional data of current year 2018-19 otherwise it reveals that it has increased in the given years .

The above trend analysis shows that people are getting encouraged to develop entrepreneurship by taking initiative to start their own venture. It exposes that performance of PMMY is effective under Kishor and Tarun Categories whereas Shishu category has dropped because of which total disbursement has all also dropped.

STEPS TAKEN BY MAHARASHTRA FOR EFFECTIVE IMPLEMENTATION OF PMMY

The above analysis reveal that small loans are getting smaller .There is drop in disbursement as a result of lower number of sanctioned application. It indicates that entrepreneurs are not willing to take small loans for their start-ups . Demonetisation and GST has also affected the market which has led to Slow entrepreneurial activity in the year 2017-18.

In this regard Maharashtra government consistently organise camp to strengthen the central government's flagship PMMY which aims to provide loans upto Rs 10 lakh to entrepreneurs involved in the micro enterprises sector.

Besides Instructions are given to all district heads and bankers to create awareness about the scheme with a special focus on women start-up owners and young entrepreneurs. The main idea is to fund those with a financially viable business model.

CONCLUSION

Government initiatives to encourage young, educated and skilful entrepreneurs are useful tool in employment generation and economic development. It not only meant to provide platform to new business and employment generation but also plays a vital role in women empowerment. It helps the women to become self-sufficient and help t underprivileged class to become self-employed . Therefore Prime Minister Mudra Yojana should be implemented effectively in all the states. In this context financial awareness programme should be conducted regularly and should reach the ground level. However, the initiative under PPMY is indeed a game changer in long run.

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Track – 3

TECHNOLOGIES IN POLICY IMPLEMENTATION

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GEOGRAPHIC INFORMATION SYSTEM: - A HELP TOWARDS HEALTHCARE EMERGENCY

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ABSTRACT
Geographic Information System (GIS) is very powerful tool and have touched many industries; like urban planning, agricultural applications and many more. Public health is one important area among this. Today's healthcare sector has transformed a lot in terms of quality, affordability and specialized caring. But in India the concern is how to felicitate right treatment at right time to patients with ease. In this regard Geographic Information System with data informatics can be helpful tool.

Keywords: Geographic Information System, healthcare, Hospitals

INTRODUCTION
Healthcare is most important aspect of human life. With the rise in technology, there is a high demand for quality and affordable healthcare in India. In last decade hospitals and medical facilities have grown rapidly. Despite progress, sometimes it is difficult to get medical aid in time. In case of Heart Attack or Major Accident timely help can reverse or minimize its effect. For this many problem may be there i.e. traffic Jam, lack of knowledge of Proper Hospital, Room availability, Admission availability in emergency cases and so on. In solution to this Geographic information systems and informatics jointly solve the problem.

OBJECTIVES OF THE STUDY
Main aim of this research is to focus and try to find solution for the problems faced by common public at the time of medical emergency.

RESEARCH METHODOLOGY
Secondary data sources including web references.

SCOPE OF THE STUDY
Electronic health records are obviously critical tools for healthcare improvement, but they alone aren't enough to fill gap between hospital and patients. When patient have medical emergency, they can use some tools which will give them idea about which hospital they should reach in minimum time, suitable for their disease with their affordability. .

PROBLEMS IN MEDICAL EMERGENCY
Today's large urban hospitals are not clear for many and not familiar with how they work. In general, there are two major types of hospital admissions: emergency and elective. In case of emergency when patient need urgent medical help as early as possible, synchronisation of information about various factors can be helpful in making him to reach the correct place (hospital) for meaningful treatment. Some of them are narrated below: -

1. **Transportation to the right hospital in minimal time**
   In case of exigency when the person needs to be transported to nearby appropriate hospital, the information about the nearby suitable/appropriate hospital that too in minimum time shall be available. Time being an important aspect, distance and time required to reach there needs to be available in real time.

2. **Hospital readiness for the support**
   The support required for the patient within time frame from the hospital side is very crucial that too when hospital does not have any information about the patient. Apart from this the availability of specialised doctors, bed for the patient also plays vital role basis the patient needs to search another hospital for treatment. Such information shall be available beforehand.

3. **Mediclaim Insurance or Financial Support**
   Nowadays most of us are covered under Mediclaim as Medical treatment is very expensive thing, the information to the Mediclaim agency and their co-ordination with the hospital is in real time is most desirable thing for the patient in need. The formalities consume some vital time which can be managed with this.

4. **Medical History**
   Medical history of the patient at this moment of time is very crucial which could help to handle the situation in better way as patient may not be in position to explain everything to Doctor.

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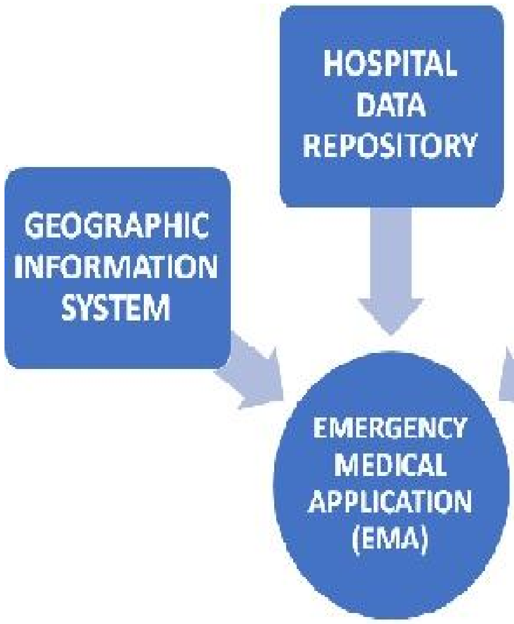
IT BASED SYNCHRONISATION OF INFORMATION AT ONE GO

Above all mentioned information can by synchronised at one go with IT solution for better handling of situation at critical stage that too at the time when it is required by third person or agency and the patient or its caretaker many not be equipped with all required information to be shared. As a solution a single system for all the problem shall be available. This system can be created in combination of Geographic Information System and big data management tools, which will provide all the data of relevant hospitals with reachability ease and other interlinked information about Mediclaim and personal health related data. This System will be helpful to general public for their own benefit.

EMERGENCY MEDICAL APPLICATION

EMERGENCY MEDICAL APPLICATION (EMA) = GEOGRAPHIC INFORMATION SYSTEM + HOSPITAL DATA REPOSITORY + DATA ANALYSIS



GEOGRAPHIC INFORMATION SYSTEM

"Transportation to the right hospital in minimal time" approach can be obtained with Geographic Information System. Using GIS application in one search user can get suggestion which hospital shall be approached at the time of emergency with features such as distance, road condition and appropriate medical service.

HOSPITAL DATA CENTRE

A data repository related to all hospitals can be created with the permission and help of government. In this repository all the data like healthcare facilities information, specialization areas, charges / Mediclaim facility status should be made transparent. In addition, admission status should be up-to-date so availability can be shown at the time of search result itself.

DATA ANALYSIS

Data analysis plays important role with GIS and Hospital data centre repository. In the data analysis part, it will find locations of relevant and reachable hospitals from GIS data set and filter specialized hospital list, affordability and admission status from hospital Data repository. After checking both the things it will display suggestion which can save time and life of patient.

LIMITATIONS

In India most of the people are not aware of technology and related facilities so after successful creation of above model also usability among public may not be, as per expectation.

LITERATURE REVIEW

"GIS in Hospital and Healthcare Emergency Management"- ByGISP, Ric Skinner. Comprehensive discussion of the critical role GIS plays in hospital and healthcare emergency management and disaster response.

SUGGESTIONS

Emergency Medical Application can be created and promoted for general public. Government should take initiative to create hospital data repository so it can be useful and transparent.

CONCLUSION

Geographic Information System is very useful tool for health sector also. It has been found that in near future Emergency Medical Application can be developed with the help of GIS, Hospital Data Repository, DATA ANALYSIS TOOLS will be helpful for public at greater extent. It is the goal of this paper to encourage research fraternity to create and design application and populate it which will be useful for general public.

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IMPACT OF ARTIFICIAL INTELLIGENCE ON EMPLOYMENT AND PUBLIC POLICY

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ABSTRACT
Emerging technologies like industrial robots, artificial intelligence, and machine learning are advancing at a rapid pace, but there has been little attention to their impact on employment and public policy. What happens if robots end up taking jobs from humans and how this will affect public policy. While emerging technologies can improve the speed, quality and cost of available goods and services, they may also displace large numbers of workers. This paper suggests various alternatives for employment and public policy using one case study.

Keywords: artificial intelligence, machine learning, employment.

INTRODUCTION
The worldwide number of industrial robots has increased rapidly over the past few years. The falling prices of robots, which can operate all day without interruption, make them cost-competitive with human workers. In the service sector, computer algorithms can execute stock trades in a fraction of a second, much faster than any human. As these technologies become cheaper, more capable, and more widespread, they will find even more applications in an economy.

Experts disagree on the size of the impact that automation technologies will have on the workforce. While some warn of staggering unemployment, others point out that technology may create new job categories that will employ displaced workers.

A third group argues that the computers will have little effect on employment in the future. If automation technologies like robots and artificial intelligence make jobs less secure in the future, there needs to be a way to deliver benefits outside of jobs. Flexible security is one idea for providing healthcare, education, and housing assistance whether someone is formally employed. Providing a guaranteed basic income or encouraging corporate profit-sharing are some ideas that need to be considered in the case of persistent unemployment.

Striking economic changes in order to restructure how our society delivers on the social contract, such as:

- Mandating a basic income guarantee for a reasonable standard of living to combat persistent unemployment or underemployment posed by the automation economy.
- Providing activity accounts for lifetime learning and job retraining to motivate the workforce to keep pace with innovation.
- Offering incentives for volunteerism—beneficial for many people who in the future may not be able to provide for their families through regular employment but may still would enrich their communities. [1]

OBJECTIVES OF STUDY
This study aims to find whether Artificial Intelligence technology makes workers insecure for their job. Also provides some suggestions for changing policy when new technology takes place in the industry.

RESEARCH METHODOLOGY
The researcher has adopted *explanatory*, *descriptive* and *exploratory* methodology. For this report, reliance has been placed on books, journals, newspapers and online database. This paper is based on secondary data for which references are collected from various sources.

A CASE STUDY ON AMAZON
Amazon bought Kiva in 2012 for $775 million in cash and started introducing the robots into its warehouses in 2014. By the end of 2015, Amazon was having 30,000 fulfilment robots working in its warehouses worldwide and the company was expecting to replace all employees who perform repetitive tasks with machines. In August 2017, the 1,00,000 orange robots glided through Amazon warehouses and the thousands of Amazonians who built, programmed, and used them became the part of the evolving relationship between humans and their tools that awakens new possibilities. [1]

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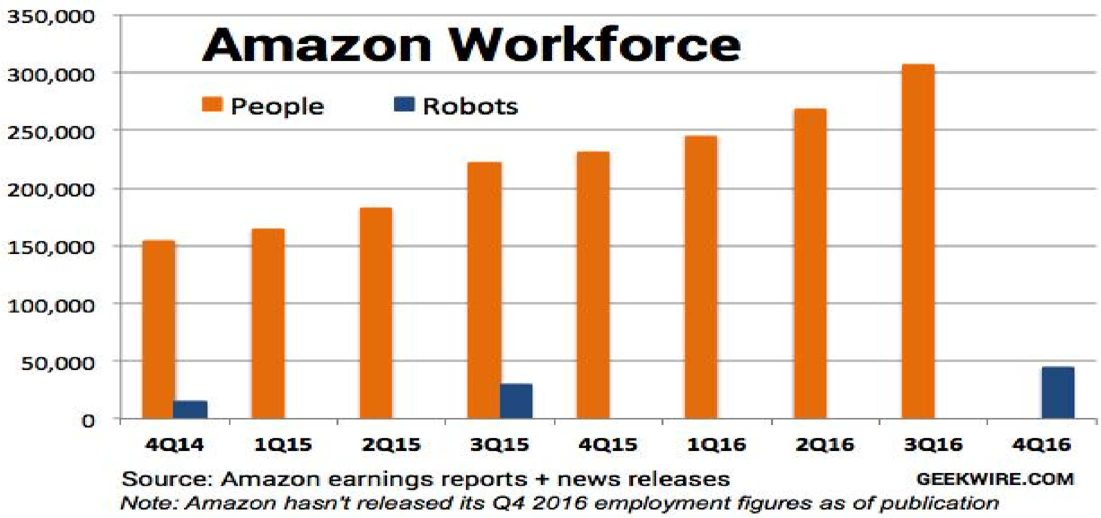

Figure-1: Amazon workforce (people and robots)

As shown in the figure 1, in 4th quarter of 2014, the number of robots was below 20,000. In 3rd quarter of 2015, it increased to 30,000 and by end of 4th quarter, the number of robots reached to more than 40,000. As per the available data, by the end of 3rd quarter of 2017, the number of robots at amazon reached to 1,00,000. Even though the number of robots increased as the time passes by, the number of people working at Amazon also increased. Only difference may be in the kind of work, which they might be performing before.

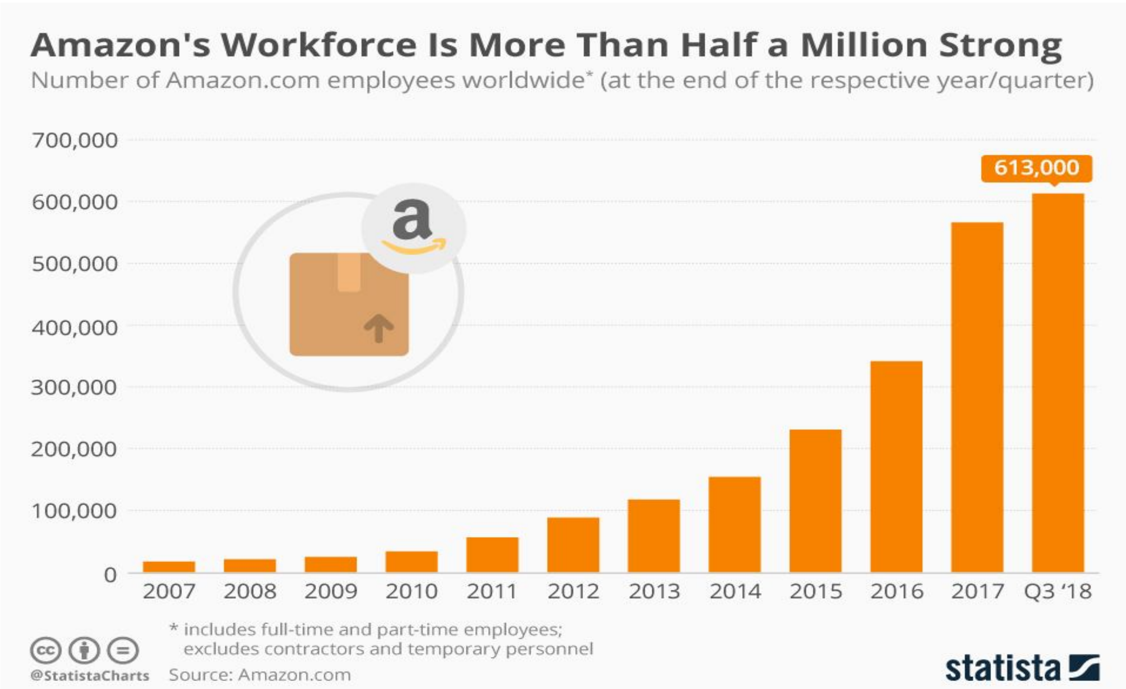

Figure-2: Number of Amazon.com employees worldwide (at the end of respective year / quarter)

Another similar figure, the figure 2 shows that as the year increases, the number of employees at Amazon also increases. This trend is going on up to 3rd quarter of 2018.

Amazon also says automation has meant the creation of desirable, high-skilled jobs designing robots and teaching them how to do things, as well as middle-skilled jobs such as repairing the robots, or simply focusing on more sophisticated warehouse tasks while letting machines do the boring stuff. [1]

Amazon’s warehouses, which now employ more than 1,25,000 people across the United States, are being outfitted with the latest in robots and technology, but not at the expense of human jobs.

Perhaps no company embodies the anxieties and hopes around automation better than Amazon. Many people, including President Trump, blame the company for destroying traditional retail jobs by enticing people to shop online. At the same time, the company’s eye-popping growth has turned it into a hiring machine, with an unquenchable need for entry-level warehouse workers to satisfy customer orders.

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The robots help enable the kind of efficiency gains that allow a customer to order a variety of products and have them delivered in a couple of days.

Complicating the equation even more, Amazon is also on the forefront of automation, finding new ways of getting robots to do the work once handled by employees.

The robots make warehouse work less tedious and physically taxing, while also enabling the kinds of efficiency gains that let a customer order dental floss after breakfast and receive it before dinner. The dynamics between people and machines play out daily on the floor of Amazon warehouses.

As per Dave Clark, the top executive in charge of operations at Amazon, the company wanted the machines to perform the most monotonous tasks, leaving people to do jobs that engage them mentally.

The robots also cut down on the walking required of workers, making Amazon pickers more efficient and less tired. The robots also allow Amazon to pack shelves together like cars in rush-hour traffic, because they no longer need aisle space for humans. The greater density of shelf space means more inventory under one roof, which means better selection for customers.

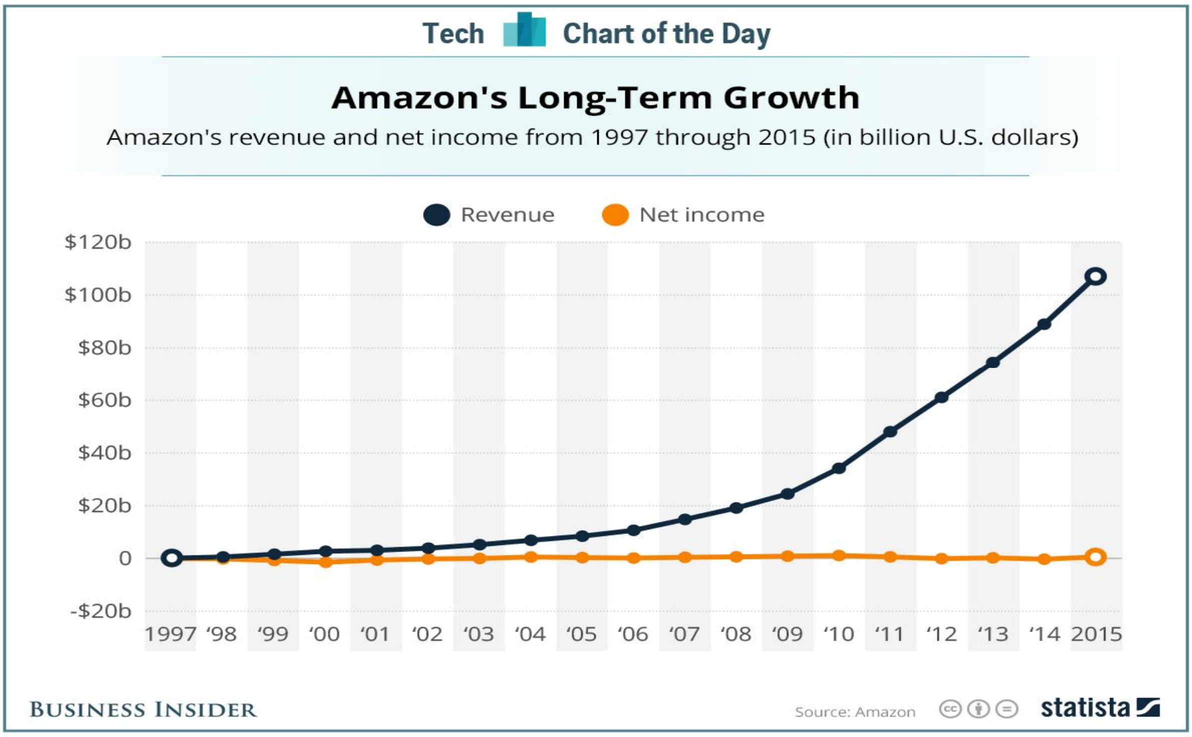

Figure-3: Amazon's Net income and Revenue

The Amazon warehouse in Florence shows the latest example of the kinds of jobs machines can do better than people. Figure 3 shows Amazon's net income and revenue.

What happens when the future generations of robots arrive?

For now, there are warehouse tasks — for example, picking individual items off shelves, with all their various shapes and sizes — where people outperform robots. Amazon has added 80,000 warehouse employees in the United States since adding the Kiva robots, for a total of more than 125,000 warehouse employees. And it says the warehouse hiring spree will continue. [2]

CONCLUSION

Job losses in rapidly advancing sectors are offset by gains in other activities spurred by a growing economy. Technology is contributing to the disappearance of low-skill jobs, both in manufacturing and in clerical work, but it helps to create both middle skilled and highly skilled positions.

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INTEGRETAION OF SMART BOARD IN TEACHING FOR B.COM STUDENTS IN GHAZIABAD

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ABSTRACT

Technology has become more accessible to the teachers in the past few years. Teachers should use technology for their professional development and to have positive relation with students on a regular basis. This research paper focuses on the smart board, and its purpose is to examine its effect on the college system. The study was conducted via a questionnaire completed by 130 respondents (boys and girls) at the B. Com Level. We hypothesized that smart boards improve teaching, based on the teaching measures order and organization, level of clarity, interest, and general level of satisfaction. The main finding is that the major improvement is found in the variable of clarity since the introduction of smart boards is in the lecture room and a significant difference was found in the variable of interest, in favor of the girls. Interactive technology increased student contact time and decreased behavioral issues.

Keywords: Technology, smart board, clarity, interest, motivation of students.

1. INTRODUCTION

The first Electronic SMART Board was introduced in 1991.Many years have passed and today, SMART Board has come to revolutionize the education world and has become an effective tool for student motivation. There are different terms used to relate this electronic device. Some people called it White Electronic Board, others Interactive Whiteboard, or how is commonly known SMART Board. The Smart Board is an interactive projection display that assists educators and business leaders to integrate diverse learning tools, such as images, websites, and videos, into a lesson. It is connected to a computer and to a projector which displays the image seen on the computer screen. First the software (and hardware) must be engaged, and then the board must be oriented. Once this is accomplished, you are ready to begin. SMART Boards allow teachers to be creative on lessons planning to grab student's attention and facilitate the process of new concepts comprehension.

2. LITERATURE REVIEW

Interactive smart boards have gained a reputation in the educational system from the first grade to the university stage (Bell, 2002; Oigara, 2010). Cognitive research has shown that learning is most effective when four fundamental characteristics are present: active engagement, participation in groups, frequent interaction and feedback, and connection to real-world contexts (Roschelle et al., 2000). Research in educational technology has shown that combining smart boards with computer use increases the interactive atmosphere in the classroom (Carbonara, 2005; Oigara & Keengwe, 2011). The interactive quality of a smart board lends itself to a degree of student participation not offered by other presentation methods. Certain factors play a major role in how smart boards are used in education and are sometimes called "contextual factors". The most common contextual factors include school culture, teacher training, time to practice and prepare materials, teacher confidence, and technical support (Digregorio & Sobel-Lojeski, 2010). The smart board works in conjunction with a projector to create the image on the board. When working with the board, it is very easy to step into the light produced by the projector, thus creating a shadow which makes it impossible to see what you are writing or doing. The audience is also not able to see the presentation, thus leading to frustration for the audience and presenter. Applications of the smart board are dependent on the software that is installed and used on the computer connected to the smart board. Some of the many applications available include hiding and revealing, writing and manipulating text, handwriting recognition, saving, retrieving, and printing notes, capturing and manipulating web content, shading, coloring, and animation. In addition, more recent smart board software allows the teacher to connect over the Internet to a library of subject specific flash content like a virtual calculator, virtual frog dissector, interactive maps, and more. Many libraries are located at the smart board manufacturer's website, so that content can be added on a regular basis, giving teachers more options (Digregorio & Sobel-Lojeski, 2010).

Smart boards offer more benefits than computers. Computers are designed for individual use, whereas smart boards are designed for whole-class instruction. The entire premise of this technology is built upon active engagement. Touch-sensitive screens are mounted on the wall of the classroom and a projector shows information that can be manipulated and displayed with unlimited capabilities. The advantage of smart board technology is its design for use in a spacious work area with group interaction. The enlarged visuals are easily seen due to the size of the interactive whiteboard. Participants become both visually and physically engaged as

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they connect with electric content and multimedia in a collaborative learning environment (Smart Technologies, 2004). Using special pens, students and/or teachers write directly on the screen. They can manipulate text and images, view websites, cut and paste research information, view video clips, formulate graphs and charts, and design vivid and creative presentations. Students combine their cognitive and physical abilities to interact with smart board technology. The interactive nature of the technology and the state-of-the art software enable students to generate activities that are engaging, useful, and enlightening. Informational text, research, and real-time Internet sites can be easily incorporated and accessed during the lesson (Starkman, 2006). Additional interactive features include the conversion of handwritten text to typewritten text, drag and drop boxes, the opportunity to highlight specific words, and the option of diagramming/scaffolding information. Teachers can download lesson plans, adjust them to the specific needs of the students, and save them for future use.

3. OBJECTIVE OF THE STUDY

1) Use of smart boards improves order and organization among students.

2) Use of smart boards improves the level of clarity among students.

3) Use of smart boards improves interest among students.

4) Use of smart boards improves the overall level of satisfaction among students.

4. RESEARCH METHODOLOGY

This study was conducted in Ghaziabad. For this study 130 respondents were selected, and data were collected through questionnaire. The nature of data collected for the research is primary data. The data has been collected directly from the sample respondents who are studying in B. Com in Ghaziabad.

5. TOOLS USED

In order to evaluate the students' overall satisfaction with smart boards and the level of order and organization, clarity, and interest, the Students' Attitudes to Meaningful Learning in an Innovative Environment questionnaire (Dori & Kurtz, 2015) was administered. The original questionnaire was used online, and the current study used a printed version. The number of questions was adapted to the current hypotheses. The questionnaire includes 31 items and the students were asked to note the accuracy of the statements on a scale of 1— "not at all" to 5 "very strongly". The questions were categorized by the four criteria examined in our research hypothesis. In addition to the questionnaire for the students, personal interviews were also held with teachers at the college who use smart boards to teach.Based on the questionnaire data, a Pearson correlation was conducted and examining the relationship between the various variables in the research hypothesis: order and organization, clarity, interest, and overall satisfaction. Gender-based differences. We used an analysis of variance to check for the variable that had the most effect on the change that occurred upon switching to smart boards.

6. RESEARCH DESIGN

Independent variable: 1) Gender , 2) College , 3) Grade level.

Dependent variable: 1) Order and organization, 2) Clarity, 3) Interest, 4) Overall satisfaction.

7. RESULT ANALYSIS

In order to examine the relationship between use of smart boards and student evaluations of the dimensions of outstanding teaching, a test was held to check Pearson correlations between the variables. Analysis of the results showed a significantly positive correlation between order and organization—and level of clarity ($p<0.01$). The higher students' level of order and organization the higher their clarity. Moreover, a significantly positive correlation was found between order and organization—and level of interest ($p<0.01$). The higher students' level of order and organization the higher their interest. Similarly, a significantly positive correlation was found between level of clarity and level of interest ($p<0.01$). The higher the interest the higher the clarity. Another significantly positive correlation was found between level of overall satisfaction and level of order and organization ($p<0.001$). The higher students' level of order and organization the higher their overall satisfaction. Moreover, a significantly positive correlation was found between the level of overall satisfaction and the level of clarity ($p<0.01$). The higher the level of clarity the higher the overall satisfaction. Similarly, a significantly positive correlation was found between the level of overall satisfaction and the level of interest ($p<0.01$). The higher the interest the higher the overall satisfaction (see Table 1).

	Order and organization	**Level of clarity**	**Level of interest**	**Overall satisfaction**
Order and organization	**-**			
Level of clarity	**.619****	**-**		

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Level of interest	**.590****	**.715****	**-**	
Overall satisfaction	**.670****	**.801****	**.786****	**-**

**p<0.01

Table-1: Pearson correlations between the research variables for their strength, direction, and significance

In order to explore which of the measures affected by smart boards showed the most improvement, a one-way analysis of variance for repeated measures was conducted. Analysis of the results indicates a significant difference between the areas of improvement that occurred as a result of using smart boards (F (2.068, 266.735)=18.074, p<0.01). Examination of the source of the differences' significance was performed using a Bonferroni post hoc test, which found that the significantly largest improvement was evident in the area of clarity. It is also possible to see that the improvement in overall satisfaction is greater than the improvement in order and organization and in level of interest. No significant difference was found between improvement in the areas of order and organization—and level of interest (see Figure 1).

Fig-1

In order to refute alternative explanations, gender-based differences in the areas affected by smart boards were examined. A t-test for independent samples showed no significant difference between boys and girls in the level of order and organization (t (97.745)=1.412, p>0.05) or in the level of clarity (t(128)=1.479, p>0.05). However, a significant gender-based difference was found in level of interest (t(128)=2.988, p<0.01), with the level of interest higher among girls than among boys. Nonetheless, no significant difference was found between boys and girls in the level of overall satisfaction (t(128)=1.228, p>0.05) (see Table 2).

	Boys		**Girls**	
	n=77		**n=78**	
Variable	**M**	**SD**	**M**	**SD**
Order and organization	3.032	1.014	3.321	1.225
Level of clarity	3.479	0.738	3.679	0.789
Level of interest	3.044	0.778	3.474	0.847
Overall satisfaction	3.376	0.618	3.525	0.769

Table-2: Means and standard deviations in each area by gender

7. FINDINGS AND CONCLUSION

When attempting to investigate the effect of introducing smart boards as a mechanism of change in the college system, it was found that the use of smart boards improves order and organization, level of clarity, interest, and level of overall satisfaction among B.C.om students. The analysis of variance conducted indeed indicated a significant difference in the level of improvement as a result of using smart boards, but the post hoc analysis showed that a significantly meaningful improvement was only evident in the area of clarity, thus confirming the second hypothesis. In contrast, the first, third, and fourth hypothesis were refuted, as in the other areas the greatest improvement was evident in overall satisfaction. In order to refute alternative explanations, differences in gender was examined. There appears to be a gender-based difference in areas affected by smart boards, such that the level of interest among girls is significantly higher than among boys. A study that examined inter-gender differences found that girls achieve greater scores on personal, social, and emotional development. They are more diligent in solving problems, concentrate better, understand what is correct and what is incorrect (Fisher, 2013).

This indicates that when students follow the teacher and are attentive to the course of the lesson, clearly understand what has been taught to date and what will be taught in the next stage, their level of interest will be higher. The findings show that the level of clarity also rises with order and organization. A possible explanation is that the more the student is organized and concentrated on the lesson, the clearer the study material will be for him or her. This also leads to a positive correlation between interest and clarity, where the higher the level of interest, i.e., when the student is concentrated and interested in the study material, the higher the level of clarity. Obviously, the higher the student's order and organization, clarity, and interest, the higher his or her overall satisfaction. Hence, it seems that all four variables of order and organization, clarity, interest, and overall satisfaction, derive from each other, such that each contributes to the student's success and achievement improvement. All the above is compatible with the research literature presented in the Introduction. Many researchers have found a relationship between the introduction of technology in general and of smart boards in particular in colleges, and students' level of interest.

8. LIMITATIONS

1. The student population sampled in the study was taken in its entirety from the same geographical region.
2. The generation gap between the senior teachers, novice teachers, and students.
3. The study is restricted to Ghaziabad city only.
4. The number of respondents are restricted to 130 only.

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MOBILE APPLICATIONS -A BOON FOR RURAL INDIA

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ABSTRACT
Mobile has completely changed the world of communication in the 21st century. In the 3rd millennium mobile device is viewed as one of the most effective tools to bring change in governance. In the beginning, mobile was primarily used as a mode of communication but the Government agencies today find it very helpful to not only disseminate crucial information but also to deliver citizen services "Anytime, Anywhere". Mobiles are now being used to deliver services like health, education, banking, commercial services, and so on This paper explores how the mobile technology helps to implement Government policies in rural India.

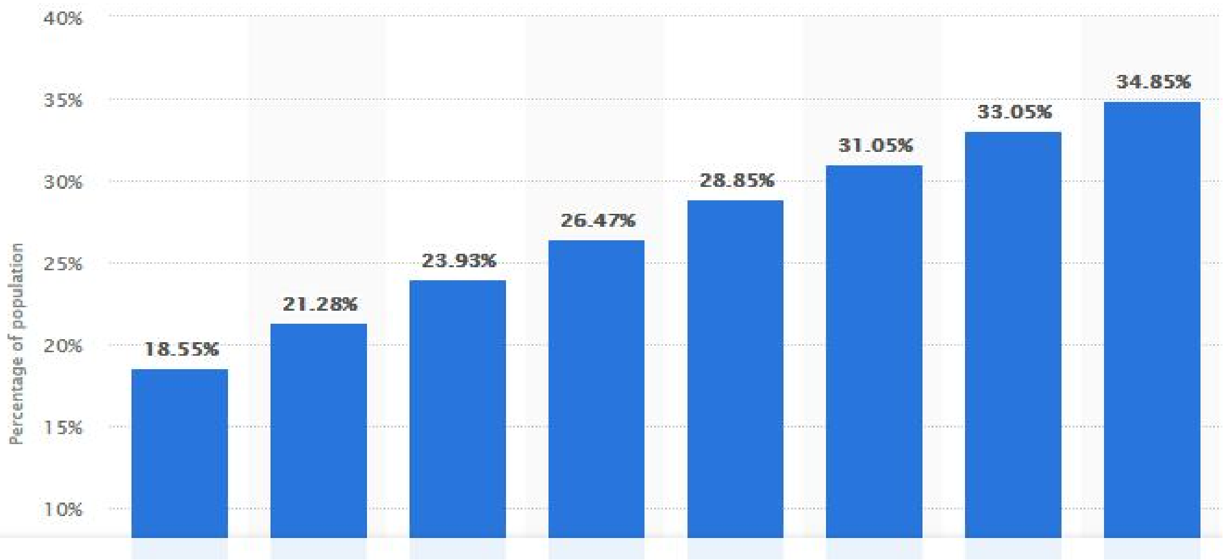
Keywords:Mobile technology,rural india,government policies.

1. INTRODUCTION

Mobile technologies are increasingly growing in developing countries like India. There have been several new researches and developments in this space. Nowadays mobile is becoming an important ICT tool not only in urban regions but also in remote and rural areas. The rapid advancement in the technologies, ease of use and the falling costs of devices, make the mobile an appropriate and adaptable tool to bridge the digital divide. The availability of low-cost mobile phones and the already broad coverage of GSM networks in India is a huge opportunity to provide services that would trigger development and improve people’s lives.

With over 900 million mobile devices in use at present, 377 million of which are in rural India, the mobile industry is posting a staggering growth of 43.23% annually. Newer, cheaper models and competitive rate plans are ensuring that almost 6 million new users are being added every month. So what better way to make mobile as the medium to deliver solutions to the people who need it at the grassroots. From remote monitoring of crops to reaching out to potential markets, from last mile delivery of government and private services to addressing domestic violence issues ingeniously, mobile phones are being used in a host of ways to uplift and empower rural India.

This statistic gives information on the mobile internet penetration in India from 2015 to 2022. In 2017, 23.93 percent of the population accessed the internet from their mobile phone. This figure is expected to grow to 34.85 percent in 2022.



2. DIFFERENT MOBILE APPS USED BY RURAL PEOPLE

The Indian Government launched digital India plan to harness digital technologies to improve the standard of living in rural areas. In a step further at the recently concluded India Mobile Congress 2017 the government also announced it would set up a high level committee on 5G technology and chart out a road map to explore and adopt the technology by 2020. We take a look at some applications which are transforming transactions and simplifying lives in various sectors across rural India

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Mahala Shakti (Teaching rural women to learn basic mathematics & other topics)
This initiative by Human Welfare Association aims to empower the most disadvantaged section of rural women in Varanasi. Through 100 Self Help Groups (SHGs), this initiative is empowering rural women to experience an quality of life through education initiatives. Mahila Shakti uses mobile as a powerful tool to impart education at a very basic level. Through this initiative, many women have learnt basic mathematics. A lot of these women now efficiently play the roles of entrepreneurs, bankers, teachers, accountants, etc.

Kisan Sanchar (Providing valuable information about agriculture to Indian farmers)
This amazing initiative is solving the Indian farmer’s problems through SMS, voice and a dedicated helpline service. Kisan Sanchar provides valuable information about agriculture with the help of a network of over 35,000 farmers across India. Many farmers risk their health and crops by using strong chemicals. Ishwar was one of these farmers in Haryana. But he soon realised the harmful effects of chemicals and invented an organic fertilizer. Kisan Sanchar is connecting farmers like him to others across the country so that their solutions can be widely adapted.

My Health, My Voice (Helping pregnant women get access to free governmental health facilities)
As per The World Bank reports, India witnessed 190 women deaths during pregnancy and childbirth per 100,000 live births in 2013. With a grave lack of awareness and facilities, rural women tend to suffer the most. The “My Health, My Voice” initiative started by Sahayog India organization in Uttar Pradesh is improving this situation with help from a mobile phone. This mobile-enabled Interactive Voice Response system (IVR) focuses on helping pregnant women get access to their rightful free governmental health facilities. Women can use the dedicated helplines and report pregnancy-related issues in their preferred language.

EduVARTA(Notifying rural youth about various job opportunities)
Often in rural areas, the youth fail to avail the right job opportunities due to lack of information and awareness. As a majority of the young minds have access to mobile phones, eduVARTA decided to use it as a tool to notify the youngsters about various educational, job and career-related information through regular SMS-based alert system. This interesting initiative already has 30,000 subscribers and has reached out to over 1,20,000 beneficiaries. The alert service provides valuable information on several scholarships and courses that help the students get one step closer to their dreams.

Hello Sakhi (Supporting victims of domestic violence)
Around 70% of all women in India are victims of domestic violence, and as per National Crime Records Bureau, one case of cruelty is committed by either the husband or a relative of the husband every nine minutes. The “Hello Sakhi” initiative by Kutch Mahila Vikas Sangathan (KMVS) and the police department of Kutch in Gujarat is helping the victims of domestic violence through mobile phones. A mobile helpline is providing valuable support to women in distress and helping them with legal assistance, counselling and rehabilitation support. A familiar voice at the other side of the phone and an assurance to help is all the women in need ask for and Hello Sakhi has become their closest friend by helping over 11,000 women across 940 villages so far.

Barefoot College (Educating and enabling women to share their views, ideas & issues)
In the rural Tilonia district of Rajasthan, a mobile phone and a community radio is bringing a wind of change by enabling rural women to get knowledge on issues like healthcare, environment, education, employment, etc. Through Barefoot College, women share their views, ideas and issues by simply making a call, enabling them to become change agents. People can get access to the latest information, call their dedicated helplines and even send SMS to get information on local panchayat news, weather, etc. The community radio that connects people through a mobile phone reaches out to 1,00,000 listeners spread across 15 villages

Pradhan Mantri Krishi Sinchai Yojana (PMKSY)
This scheme was launched with the aim of irrigating every Indian farm and improving water-use efficiency.It targeted poverty reduction, food security and climate change, which is hurting agriculture with rising temperatures, increasingly frequent floods and droughts, and a greater incidence of pests and diseases. Through its Digital India programme, GOI is working to transform the country's rural economy and create skilled jobs in rural areas. New technologies enable small farmers to shift from input-intensive to knowledge-intensive agriculture. Precision agriculture can improve the timeliness of planting, secure the best market prices through market information and e-market reforms, provide fertiliser subsidies via direct bank transfers that eliminate or reduce the cost of financial intermediaries, and improve agricultural extension. Combined with improved seed supply and land and water management, which can in turn increase double and triple cropping, farmers’ income can grow.

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CONCLUSION

Mobile technology has made public service delivery systems more efficient and transparent. It has brought Government services closer to the common man in rural areas. With the ability to reach out to the departments a rural man wants and vice-versa is what makes this one of the central themes of the initiative. M-Governance has empowered various people from rural areas to communicate to the Government directly and avail multiple services without going to a Government office.

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ONLINE PAYMENT SYSTEM – A FUTURISTIC APPROACH

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ABSTRACT

The development of the Internet and the arrival of e-commerce fostered digitalization in the payment processes by providing a variety of electronic payment options including payment cards (credit and debit), digital and mobile wallets, electronic cash, contactless payment methods etc.

This paper is aimed at evaluating the present status and growth of online payment systems and looks at its future. Several online payment system services, the associated security issues and the future of such modes of payment have been analyzed. This study also analyses the various factors that affect the adoption of online payment systems by consumers. Furthermore, there can be seen a huge growth in mobile payment methods globally beating both debit and credit card payments, all due to the convenience and security offered by them. Nevertheless, various obstacles have been identified in the adoption of online payment methods; thus, some measures have to be taken for granting this industry a hopeful future. Thus, there should be a suitable trade-off between usability and security when designing online payment systems in order to attract customers. Also, technical and organizational issues which arise in the attempt to achieve interoperability must be taken into consideration by the designers. As a matter of fact, the process of developing interoperable and flexible solutions and universal standards is one of the most difficult tasks in the future ahead.

Keywords: E-Commerce; Online payment system; Digitalisation ; Online payment challenges

ONLINE PAYMENT SYSTEM – INTRODUCTION

The online payment system is a comprehensive term, portraying various scopes of delivery through electronic multichannel. Its use for various purposes offers an amplified imprecision of characterising online payment in literature. Online payment can be seen from its capacities as e-banking, m-payment, e-cash, internet banking, online banking, e-broking, e-finance and so on. All things considered, recent researchers have demonstrated a few endeavours to come up with a definition of online payment.

LITERATURE REVIEW

Dennis (2004), characterises the system of online or electronic payment as a type of financial commitment that includes the purchaser and the vendor enabled by the utilisation of electronic infrastructures. Additionally, Briggs and Brooks (2011) views online payment as a type of inter-relation amongst associations and people helped by banks and inter-switch houses that empowers financial transaction electronically.

Another point of view is put forward by Peter and Babatunde (2012) who see online payment system as any type of money exchange through the internet. On a similar note, as indicated by Adeoti and Osotimehin (2012), a system of online payment alludes to an electronic method for making payments for merchandise obtained on the web or in markets and shopping centres. Another definition suggests that online payment systems are payments made in electronic exchange conditions as exchange of money via electronic means.

Besides, Kalakota and Whinston (1997) view online or electronic payment as an exchange of money that happens online between the merchant and the purchaser. In addition, Humphrey and Hancock (1997) are of the view that online payments allude to money and related exchanges actualised utilising means of electronics. Online payment is also defined as payment by means of electronic exchange of details of credit cards, direct credit or some other electronic means other than payment with money and cheque.

Antwi et al. (2015) characterised online payment as an exchange of a fiscal claim by the payer on a party worthy to be useful. Lin and Nguyen (2001) define online payment as payments made via the automated clearing house, commercial card systems and electronic transfers. Shon and Swatman (1998) characterise online payment as any trade of money started by means of an electronic correspondence channel. Gans and Scheelings (1999), define online payment as payments made by the use of electronic signals connected debit or credit accounts. Hord (2005) observes online payment as any sort of non-money payment that does not include a paper cheque.

The payments industry all over the world is growing at a fast pace with the filtering of investments by big banks and the development of emerging technologies by progressing start-ups. It was reported by Boston Consulting Group in 2016 that the transaction banking may reach from $1.1 trillion in the year 2014 up to $2 trillion in the year 2024, While the focus has been on technology and innovation, the advantages of new payment mechanisms are now being realized by businesses for improving the bottom line and fueling corporate growth.

OBJECTIVES OF THE STUDY

- To study the challenges and problems faced by stakeholders on emphasis on security issue
- To highlight the futuristic approach in online payment method

CHALLENGES IN ONLINE PAYMENT SYSTEM

In spite of the numerous advantages of the online payment systems, they have their own difficulties and challenges even in today's technologically advanced world. The challenges are Infrastructure, Regulatory, Legal issues and Socio-Cultural issues.

1) Infrastructure

Infrastructure is fundamental for the effective execution of online payments. Appropriate infrastructure for online payments is an issue. For online payments to be fruitful, it is necessarily required to have a financially savvy and reliable infrastructure that can be availed by dominant part of the populace.

2) Regulatory and Legal Issues

National, provincial or global arrangement of laws, standards and different other directions are imperative prerequisites for the effective execution of online payment plans. A significant portion of components incorporate guidelines on tax evasion, supervision of e-money organisations and commercial banks by supervisory specialists; central banks should keep an oversight on payment systems, buyer and information protection, participation and rivalry issues. As indicated by Taddesse and Kidan (2005) the worldwide and virtual nature of online payment additionally brings up legal issues, for example, which laws are relevant in debated cases and which jurisdiction will be competent, legitimacy of digital signatures and electronic contracts. A legitimate and administrative structure that builds confidence and trust helping technical endeavours is a vital issue to be tended to in executing online payments.

3) Socio-cultural Challenges

Social and cultural dissimilarities in outlooks and the utilization of various types of cash (e.g. utilization of credit cards in North America and utilization of debit cards in Europe) muddle with the job of building an online payment system that is relevant at a global level. The discrepancy in the level of the security required and productivity among individuals of various societies and the degree of advancement worsens the issue.

New innovations won't rule the market until clients are sure that their privacy is ensured, and satisfactory confirmation of security is safeguarded. New advances likewise need to stand the test of time so as to secure people's confidence, regardless of the fact that it is simpler to use and less expensive than the more established techniques .

Overcoming Problems in Online Payment Systems

The payment systems supporting online transactions in a wireless environment should have a level of security equivalent to that of fixed networks. Furthermore, the upcoming online payment applications have to show compatibility with the current traditional payment infrastructure such that there is no problem in operating the existing infrastructure. Nevertheless, the process of making transactions in a wireless environment has several limitations which require the wireless-payment system designers to look for innovative solutions for addressing those constraints. Consequently, there is a need of achieving a trade-off between security and performance of transactions for making a secure online payment. Several measures can be taken to overcome various issues in online payment systems. Besides the tangible tools for monitoring frauds like purchase tracking, customer account and validation services, the risk management staff of a certified Level 1 PCC DSS payment processor can be used for precluding frauds. Furthermore, customer service practices like merchant accessibility and Know-Your-Customer (KYC) can be employed for substantially reducing or eliminating charge-backs. Cross-border payments which can be expensive, inefficient and slow play a significant role in international trade

SECURITY OF ONLINE PAYMENT SYSTEMS

In all information systems, the security of data and information is of significant importance. Data Security involves methodology, technology and practices which guarantee that data is secured from

1) Alteration or unintentional change (integrity),

2) Unauthorised access (confidentiality), while

3) Promptly accessible (availability) to approved clients on demand.

The online payment systems need to have all the above security features; an online payment system which is not secured will not be trusted by its clients. And, trust is extremely important to guarantee acceptance from the clients. The online banking and online payment applications have security issues as they rely upon basic ICT frameworks that make vulnerabilities in economic organisations, businesses and can possibly hurt clients.

Enhancing Online Payment Security

As more and more people are connected to the Internet, the popularity of online commercial activities is growing as well. Nevertheless, the risks associated with online payment systems are factual and multiplying day-by-day. As per the survey conducted by Association of Financial Professionals in the year 2013, it was found that about 60 per cent organisations fell prey to successful or attempted fraud payments whereas up to 63 per cent organisations showed up adoption of new security measures or preparation to do the same in the time to come . Therefore, for their wide acceptance all over the world, online payment methods must follow an efficient protocol ensuring a higher level of security for performing online transactions. The most widely recognised strategy for securing online payments is utilising cryptographic-based innovations, for example, digital signatures and encryption. On application, these innovations lessen speed and proficiency and thus trade off must be made amongst effectiveness and security.

FUTURISTIC CONSIDERATIONS

The various online payment methods employed by businesses, government and consumers are supported by an assortment of technologies, laws and institutions which combine for transferring value among parties reliably. Like every other industry, there is a competition between payment providers who face strong incentives for innovating. Several mechanisms exist in the market simultaneously since every mechanism satisfies a particular requirement. Their reliability and efficiency can be improved only if the consumers agree to embrace new and economical technologies together with the added costs. Eventually, the payment methods are a reflection of the interaction between consumers and providers.

A lot of people are of the view that the payment industry shall go through a dramatic drift in the next ten years, with the existing payment methods getting replaced by totally new online payment systems. But some people are dubious who only expect the existing systems to evolve continuously into systems that are substantially reliant on electronic components. The nature of transformation can be any of these however various obstacles have to be surmounted by consumers as well as producers of the payment services. In this section, some of the opportunities and challenges that the participants of online payment systems (including the central bank) may face have been discussed. It is observed that consumers, bankers, the Fed, emerging providers and businesses can all impact the way transactions shall be performed in the future if they take interest actively .

In order that the commerce runs smoothly, the payment process for purchasing a service or product using a debit or credit card should remain safe, efficient and easy. A number of changes including latest technologies like digital wallets and smart-phones, budding interests in making peer-to-peer payments, demand by consumers to accept payments done by cards and the transitions in buying habits, all have raged a war within this industry as businesses have to fight each other for maintaining their positions. Therefore, there is a tremendous pressure on organisations due to the following reasons :

1. New technologies have to be exploited by organisations for simplifying and enhancing the user experience. This is because online payment systems have transformed the entire industry plus the potential for mobile payments, card-reader-equipped smart-phones and contactless cards can all proclaim the subsequent revolution.
2. Peer-to-peer payments have to be accommodated since they are responsible for expanding the market beyond the retailer world. Moreover, the necessity of exchanging funds has sparked off innovations past the existing banking model even in developing nations.
3. The shift towards a cashless society should be accelerated by incorporating micropayments for vending machines, parking meters, highway tolls, etc. which otherwise involve cash handling inconvenience and other unnecessary costs.
4. A firm grip has to be kept on frauds. Since it has been proven by e-commerce that latest technology drives up fraud and brings with itself new threats that include misusing the payment network as well as data theft which can be easily exploited by anyone. For a large number of people, the next frontier is the security concerns in card-not-present transactions.
5. The alignment with international technologies and initiatives is also a must. The online payment system is a worldwide infrastructure and its weakest points are the site of attraction for attackers. The anti-fraud initiatives like 3D-Secure and EMV have been launched globally and are to be still rolled out in other markets.

6. The compliance of the online payment systems with broader data privacy obligations has to be ensured. In this regard, the collection of PCI standards is used for data breach disclosure laws and privacy mandates, and majority of these laws emphasise on the significance of data related to payments and finance.

CONCLUSION

An evolutionary succession is witnessed by payment methods from cash to cheques, to credit cards and debit cards, and currently to electronic commerce and mobile banking. Online payment methods are increasingly being used for making daily online as well as on-site purchases. Furthermore, the advancements in technology supporting mobile transactions and making them more convenient and transparent . This change in the behaviour of customers showing a transition from the traditional to an advanced online mode of payment is apparent in retailing and banking, and with nearly all available mobile devices. This study concludes that a better integration of online payment systems with the present financial and telecommunication infrastructure is necessary for a propitious future of this payment mode. Furthermore, establishing a common standard for a variety of service providers, improving the compatibility with a large number of customers, overcoming privacy and security concerns and employing the latest technology could facilitate expeditious adoption of online payment methods and expand the market for such a mode of payment.

An efficient payments system reduces the cost of exchanging goods and services, and is indispensable to the functioning of the interbank, money, and capital markets.

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PYTHON – A WAY TO CYBER SECURITY

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ABSTRACT

Cyber security is the technique of protecting computers, networks, programs and data from unauthorized access or attacks that are aimed for exploitation. The objective of cyber security is not only to avoid 100% of the attacks, something unattainable; but to reduce the "attack surface" to a minimal. The number of attack perpetrators will be always bigger than the number of cyber security experts who are trying to protect against attacks. Machine learning (ML) and Artificial Intelligence (AI) are taking cyber security and other tech fields by storm, and you can easily find a great deal of information on the use of Machine learning by both camps—defence and cyber-attacks.

Python's simple and clean structure, modular design, and extensive library make it a perfect solution for security applications. Different difficult algorithms can be easily converted in python programming language. Python is used widely in Artificial Intelligence & Machine learning. Cyber experts depend on the capability to rapidly code programs and the feature set to implement new strategies and techniques. No other language offers as influential combination, and Python stands as the must-know language for the serious security professional.

Keywords: Cyber security, Python, Artificial Intelligence (AI), Machine Learning (ML).

1. INTRODUCTION

Cyber security refers to a set of techniques used to protect the integrity of networks, programs and data from attack, damage or unauthorized access.

The core functionality of cyber security involves protection of information and systems from major cyber threats.

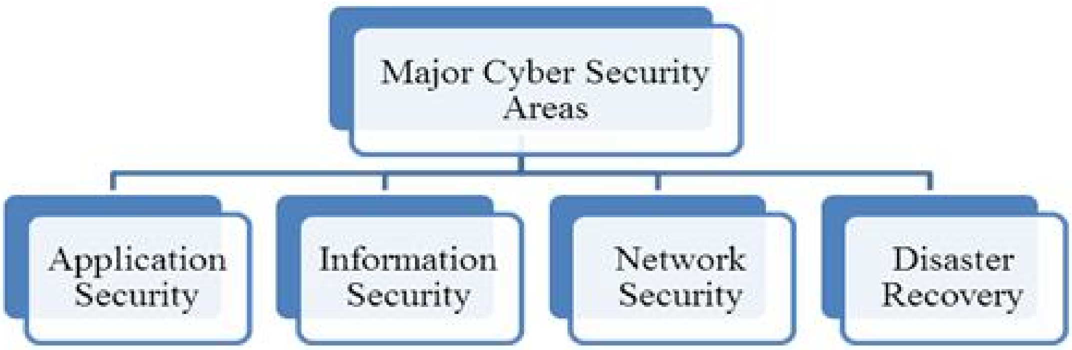

Figure-1

1. **Application Security** encompasses measures or counter-measures that are taken during the development life-cycle to protect applications from threats that can come through flaws in the application design, development, deployment, upgrade or maintenance. Some basic techniques used for application security are:
   a) **Input** parameter validation
   b) User/Role Authentication & Authorization
   c) Session management, parameter manipulation & exception management
   d) Auditing and logging etc.
2. **Information Security** protects information from unauthorized access in order to avoid identity theft and to protect privacy. Major techniques used to cover this are:
   a) Identification, authentication & authorization of user,
   b) Cryptography
3. **Network Security** encompasses activities to protect the usability, reliability, integrity and safety of the network. A variety of threats are targeted and stopped from entering or spreading on the network with effective network security. Network security components include:

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a) Anti-virus and anti-spyware

b) Firewall, to block unauthorized access to your network

c) Intrusion prevention systems (IPS) to identify fast-spreading threats, such as zero-day or zero-hour attacks

d) Virtual Private Networks (VPNs) to provide secure remote access

4. **Disaster recovery** planning is a process that includes activities like performing risk assessment, establishing priorities, developing recovery strategies in case of a disaster. Any business should have a concrete plan for disaster recovery to resume normal business operations as fast as possible after a disaster.

TYPES OF CYBER SECURITY THREATS

The process of keeping up with latest technologies, security trends and threat intelligence is a challenging task. However, it's necessary in order to protect information and other assets from cyber threats, which take many forms.

Ransomware is a type of malware that involves an attacker locking the victim's computer system files -- typically through encryption -- and demanding a payment for decrypting and unlocking them.

Malware is any file or program which is used to harm a computer user, such as worms, computer viruses, Trojan horses and spyware.

Social engineering is an attack that relies on human interaction to trick users into breaking security procedures to gain sensitive information that is typically protected.

Phishing is a form of fraud where fraudulent emails are sent that resemble emails from reputed sources; however, the intention of these emails is to steal sensitive data, such as credit card or login information.

What cyber security can prevent

The use of cyber security can help prevent cyber-attacks, data breaches and identity theft and can help in risk management.

An organization is better able to prevent and mitigate these attacks when it has a strong sense of network security and an effective incident response plan. For instance, end user protection defends information and guards against loss or theft while also scanning computers for malicious code.

Cyber Security & Machine Learning

The main benefit is that the ML algorithms will learn and predict based on experiences and results. ML software can gain the ability to learn from previous observations to make inferences about both future behaviour, as well as guess what you want to do in new scenarios.

Consider an email spam detection algorithm. Original spam filters would simply blacklist certain addresses and allow other e-mails through. ML enhanced this considerably by comparing verified spam emails with verified legitimate emails and checking which "features" were present more frequently in one or the other. For instance, intentionally misspelled words, the presence of hyperlinks to known malicious websites, and virus-laden attachments are likely features indicating spam rather than legitimate email.

This process of automatically inferring a label as spam or legitimate is called classification, and is one of the major applications of ML techniques. It is worth mentioning that one other very common technique is forecasting, the use of historical data to predict future behaviour.

Information gathering is the first step of every cyber-attack irrespective of the number of victims. Information can be grouped according to subjects and can be collected online and offline. Information can refer to people or assets. To prevent such attacks, various clustering and classification methods from K-means and random forests to neural networks can be used, which should be applied to victim’s posts on social networks.

There are two major types of ML classification techniques: supervised learning and unsupervised learning, which are differentiated by the data that they accept.

Supervised learning refers to algorithms that are provided with a set of labelled training data, with the task of learning what differentiates the labels. While in our previous example, there were only two labels i.e. “spam” and “legitimate”; other scenarios may contain many, many more. For instance, modern image recognition algorithms, such as Google Image search, can accurately distinguish tens of thousands of objects, and modern facial recognition algorithms exceed the performance of human beings. By learning what makes each category unique, the algorithm can then be presented with new, unlabelled data and apply a correct label.

Unsupervised learning refers to algorithms provided with unlabelled training data, with the task of inferring the categories all by itself. Sometimes labelled data is very rare, or the task of labelling is itself very hard, or we may not even know if labels exist. For instance, consider the case of network flow data. While we have enormous amounts of data to examine, attempting to label data would be extremely time consuming, and it would be very hard for a human to determine what label to assign. Given how good machines are at finding patterns in large datasets, it is often much simpler to have the machine separate data into groups for us.

Python Implementation

The challenge is to implement AI & ML algorithms with higher security to preserve the data integrity. Programming has become essential to cyber security. IT security professionals must efficiently write applications and scripts; often on short notice. The Python language provides unmatched ease, flexibility, and functionality for both new and proficient coders.

Python code follows and supports multiple programming paradigms including imperative, functional, procedural and object oriented. Nowadays, Python is widely used for a various high performance computing applications by a number of corporate giants including Microsoft, Google, Red Hat, IBM, Amazon and many others. Python is free and open source, and provides the implementations and interfaces for many other languages and platforms. AI & ML uses python programming for developing advanced web sites and applications for cyber security.

Python programming works with the IDE platform on which coding can be done.

Python imple-mentation	Supporting platform and language
IronPython	.NET Framework
CPython	C
Jython	Java
MicroPython	Microcontrollers
PyPy	Just-In-Time Compiler

Figure-2

Any IDE can be included to write, debug and execute the code by IDE based programming with Python. Given below is a list of Python IDEs where a graphical user interface is provided for easy programming:

IDLE	IntelliJ IDEA
Koding	Anjuta
Eric	Geany
Komodo IDE	Ninja-IDE
PIDA	KDevelop
MonoDevelop	PyCharm
Spyder	PyDev
PyScripter	SourceLair
Stani's Python Editor	Python Tools for Visual Studio
PythonAnywhere	Pyzo
Understand	Thonny

Figure-3

Whenever the topics of digital forensics, cyber security and penetration testing are discussed, professionals generally depend on a varierty of third party tools and operating systems. Kali Linux, MetaSploit, Parrot Security OS and many other tools are used in digital forensics. These tools come with in-built applications which the users can deploy without real knowledge of the internal architecture and algorithmic approach of implementation.

Python is one of the powerful programming languages used in important domains like cloud computing, Big Data analytics, network forensics, mobile app development, Web development and many others.

Hackers, penetration testers, and other security experts need a language library that provides the entire range of features to create powerful and often novel programs. Python contains modules to support Web activities such as parsing HTTP and XML and building clients. Django and other open-source Web frameworks are available from developers supporting the rapid application development methodology. Third-party modules provide robust features, such as optimized calculation handling, that make Python an increasingly solid language for data applications.

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Python is a widely and commonly used programming language for cyber security, penetration testing and digital forensic applications. Using the base programming of Python, any of the following can be performed without using any other third party tool or can be created the one:

- ✓ Web server fingerprinting
- ✓ Simulation of attacks
- ✓ Port scanning
- ✓ Website cloning
- ✓ Load generation and testing of a website
- ✓ Creating intrusion detection and prevention systems
- ✓ Wireless network scanning
- ✓ Transmission of traffic in the network
- ✓ Accessing mail server etc.

Implementing Socket programming

Similar to Java, socket programming is in-built with Python. To work with socket programming, the package socket should be first imported and then the related methods can be called. Python installation comes with the in-built IDLE GUI.


```
Python 3.6.6 (v3.6.6:4cf1f54eb7, Jun 27 2018, 03:37:03) [MSC v.1900 64 bit (AMD6
Type "copyright", "credits" or "license()" for more information.
>>> import socket
>>> socket.gethostbyname('facebook.com')
'157.240.16.35'
>>> socket.gethostname()
'SAURABHR-PC'
>>> socket.gethostbyname(socket.gethostname())
'192.168.0.105'
>>> socket.gethostbyname_ex(socket.gethostname())
('SAURABHR-PC', [], ['192.168.0.105'])
>>> socket.gethostbyname('www.facebook.com')
'157.240.16.35'
>>> socket.gethostbyname('www.gmail.com')
'172.217.166.69'
>>>
```

Figure-4

Implementing Network port scanning

The *nmap* tool is used for implementing network port scanning, but using Python socket programming, it can be implemented without any third party tool. In Kali Linux, there are number of tools available for digital forensics related to networks, but many of these implementations can be done using Python programming with just a few lines of code.

The following code checks which particular ports are open from the PortList [20, 22, 23, 80, 135, 445, and 912]. Each PortList value specifies a particular service associated with the network.

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```
port.py - H:\RP\port.py (3.6.6)
File Edit Format Run Options Window Help
import socket
RemoteIP ='172.217.166.69'
#RemoteIP ='IP Address to be Scanned'
PortList = [20, 22, 23, 80, 135, 445, 912]
for CurrentPort in PortList:
    CurrentSocket= socket.socket(socket.AF_INET,socket.SOCK_STREAM)
    resultset = CurrentSocket.connect_ex((RemoteIP, CurrentPort))
    print (CurrentPort,":", resultset)
CurrentSocket.close()
```

```
Python 3.6.6 Shell
File Edit Shell Debug Options Window Help
Python 3.6.6 (v3.6.6:4cf1f54eb7, Jun 27 2018, 03:37:03) [MSC v.1900 64 bit (AMD6
4)] on win32
Type "copyright", "credits" or "license()" for more information.
>>>
========================== RESTART: H:\RP\port.py ==========================
20 : 10060
22 : 10060
23 : 10060
80 : 0
135 : 10060
445 : 10060
912 : 10060
>>>
```

Figure-5

Geolocation Extraction

The real-time location of an IP address can be extracted using Python and Google APIs with the help of the pygeoip module. First of all, import the GeoIP database from the URL*http://dev.maxmind.com/geoip/legacy/geolite/*.

Once the database is loaded and mapped with the Python installation, any IP address can be scanned using global visibility and location.

To look up the country, use the following commands:

```
Python 3.5.4 Shell
File Edit Shell Debug Options Window Help
Python 3.5.4 (v3.5.4:3f56838, Aug  8 2017, 02:17:05) [MSC v.1900 64 bit (AMD64)]
 on win32
Type "copyright", "credits" or "license()" for more information.
>>> import pygeoip
>>> myGeoIP = pygeoip.GeoIP('GeoIP.dat')
>>> myGeoIP.country_code_by_name('google.com')
'US'
>>> myGeoIP.country_code_by_addr('172.217.167.174')
'US'
```

Figure-6

3. CONCLUSION

Nowadays, Big Data is used everywhere. To work on such huge data, ML & AI techniques are used tremendously. After looking at all the features of Python, it can be concluded that Python can be used to easily implement the above techniques.

Python features are required for providing security as well as protecting information and systems from various types of cyber threats. Cyber security experts use different modules and libraries provided by python programming language. Experts can work on different cyber security areas (**refer figure 1**) without using any other third party tool. New applications can also be created using python.

Python programming is an easy & ultimate solution for cyber security.

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RAIN SENSING ROOF FOR STADIUMS

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ABSTRACT
Rain sensing roof with maximum energy generating solar panels is basically designed for stadium wherein these smart roofs would automatically detect the rain and start closing automatically and once the rain is gone the roof would reopen. It ensures that adverse weather conditions do not affect the matches in progress as well as does not affect the further matches schedules. This entire process would be performed using the energy that is generated through the maximum energy absorbing solar panels. These Solar Panels moves according to the direction of the Sun to ensure maximum exposure to the sun which ultimately leads to absorbing more solar energy and generating more electric power which is then used as supply voltage for the working of the Rain sensing roof. When it starts raining the rain sensor would detect the rain and sends a signal to the system which then sends a signal to the motor accordingly and it will start rotating the motor and the roof will start closing. When it stops raining, the rain sensor will send this new signal to the system which then sends a signal to motors and make it rotate in reverse direction and roof opens up again. In spite of being a very rich source of Renewable energy, solar energy generation requires huge space for the solar panels which somehow becomes a big challenge in crowded cities. In this case stadium can serve as a huge open space and the energy generated through this process can also be used for the localities nearby and provide an alternative to them.

Keywords: sun, solar panels, rain, roof, stadiums.

1. INTRODUCTION
The concept mainly consists of two main modules that are interconnected with one another. The first main module the rain sensing roof and the second module is the moving solar panels which generates energy which is used for powering up the motor for moving the roof.

It is mainly used for covering the stadium, using roof which automatically closes itself when it starts raining and once it stops raining the roof automatically opens up. Also, during summer days when the sun is brightest the excessive amount of electrical energy generated can be used for other several purposes within the stadium as well as outside the stadium.

2. TECHNOLOGY AND PROGRAMMING LANGUAGES
As microcontrollers are the core of these days digital circuit design in industry this system uses it for the centralized operation and digital processing. The technology used here is embedded technology which is the future of today's modern electronics. The following are the various Programming Languages and Technology that are going to be used in the proposed system.

- **For PC system…**
  - ✓ Ardiuno Software (latest version)
- **For Embedded system (Hardware)**
  - ✓ Ardiuno Uno board
  - ✓ Rain sensor
  - ✓ Solar panels (5 V)
  - ✓ Servo sg90 motors
  - ✓ LDRs
  - ✓ Jumper Wires
  - ✓ USB cable
  - ✓ Bread Board
  - ✓ Capacitors
  - ✓ Resistors

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3. SETPS OF IMPLEMENTATION

❖ STEP 1

Starting with the project it was necessary to decide the topic. After surfing the internet for few topics and talking to the subject teachers regarding project and the upcoming inventions we came across some good projects related to implementation of technology for increased use of renewable resources especially solar energy. It was then when we came up with the topic "**Rain sensing roof**".

❖ STEP 2

The Information search for selected project was done. The information was gathered from books like

- Microcontroller [Theory and Application]- Ajay V Deshmukh
- ARM system Developer's Guide

And Websites like

- www.wikipedia.com.
- www.google.com.

❖ STEP 3

In the planning phase, stages, activities and tasks of the project was decided. The sequencing, duration and dependency of all task, as well as generic resources and the financial expenditure require to complete the project was decided. The project guide helped us a lot in this stage.

❖ STEP 4

In the designing stage, the sequence of code was developed, starting from source code, receiving code And sending code For this various models flowcharts, algorithms, data flow diagrams were developed. As the programming language for Robot side is Embedded C idea for packages and interfaces was given by our project guide.

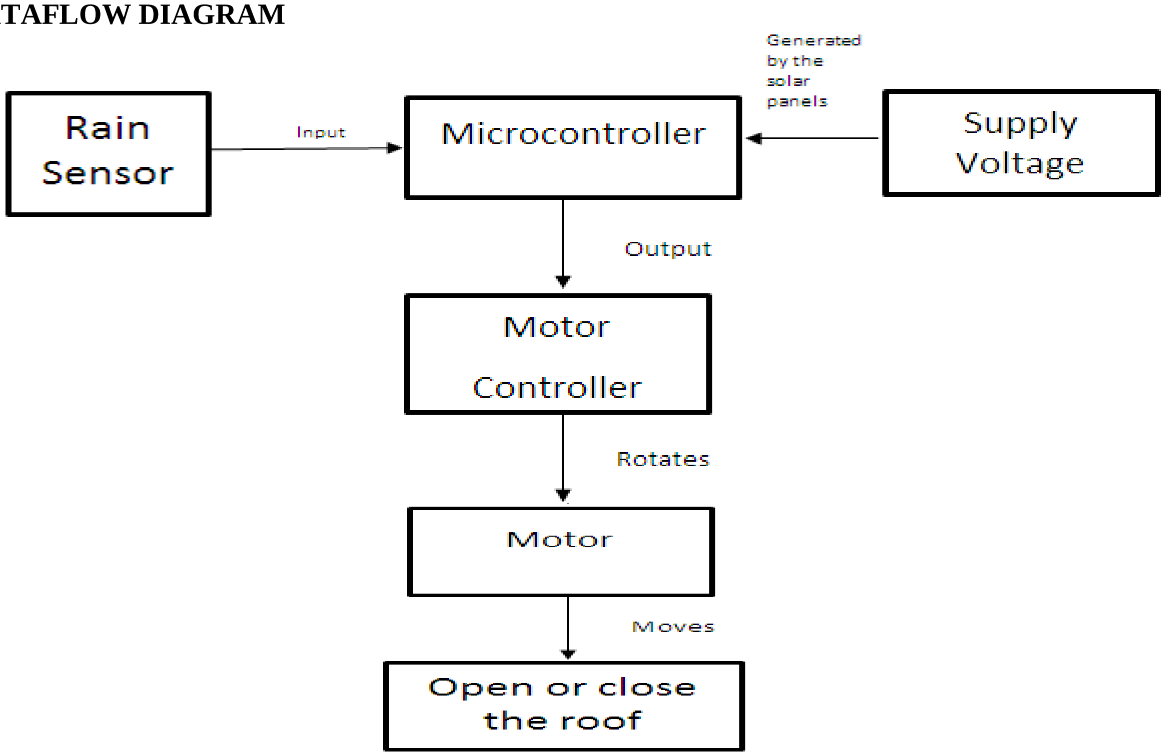
❖ STEP 5

Code was produced from the deliverable of design phase and information was gathered and produced. The different code for source, receiver and sender were done.

❖ STEP 6

After code was ready important part was testing developed software. Various testing methods like unit testing, integration testing and black box testing were performed. The various modules were unit tested and errors were found. To solve these errors integration testing was done and also finds that no new errors were introduced after integration.

4. DATAFLOW DIAGRAM



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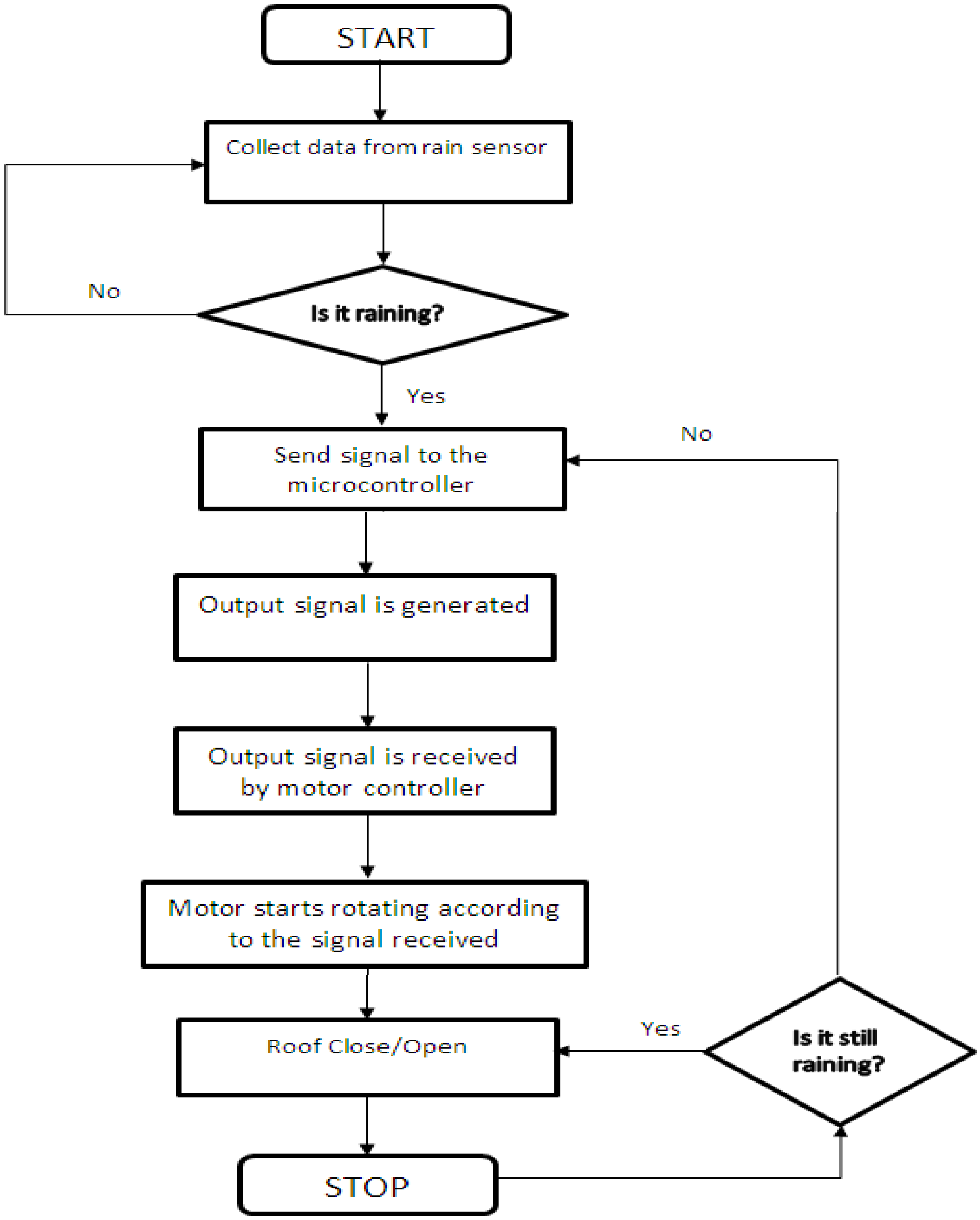
5. FLOWCHART



6. CONCLUSION

"**Rain sensing roof**" has been developed in such a way that it will satisfy all proposed requirements and also it will overcome all the existing products in market which are dedicated to this topic. We had met most of all objectives which we have decided at the beginning of concept.

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ROLE OF eMEDICAL TOURISM IN AYURVEDA OF NORTH MALABAR REGION, KERALA

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ABSTRACT

The aim of this paper is to investigate the expectations and challenges faced by e-medical tourism industry in India. India is an emerging and promising medical tourism destination. It is the most preferred nation amongst the tourists as it is famous for traditional treatments combined with modern amenities handsomely contributing to Indian economy. Growth in ICT has further enhanced the status of India in this field. Qualified doctors, nurses and experts in Ayurveda, naturopathy, and such traditional treatment at relatively low cost are contributing towards this growth.

However, there are limitations in the e-domain as access to all traditional treatments is still an illusion. Care also needs to be taken in strengthening the ICT infrastructure and legal aspects of these treatments. Regional factors like poor internet connectivity, irregular electric supply; and resistance from locals in imparting the know-how to future generations are some major challenges faced by e-medical tourism industry.

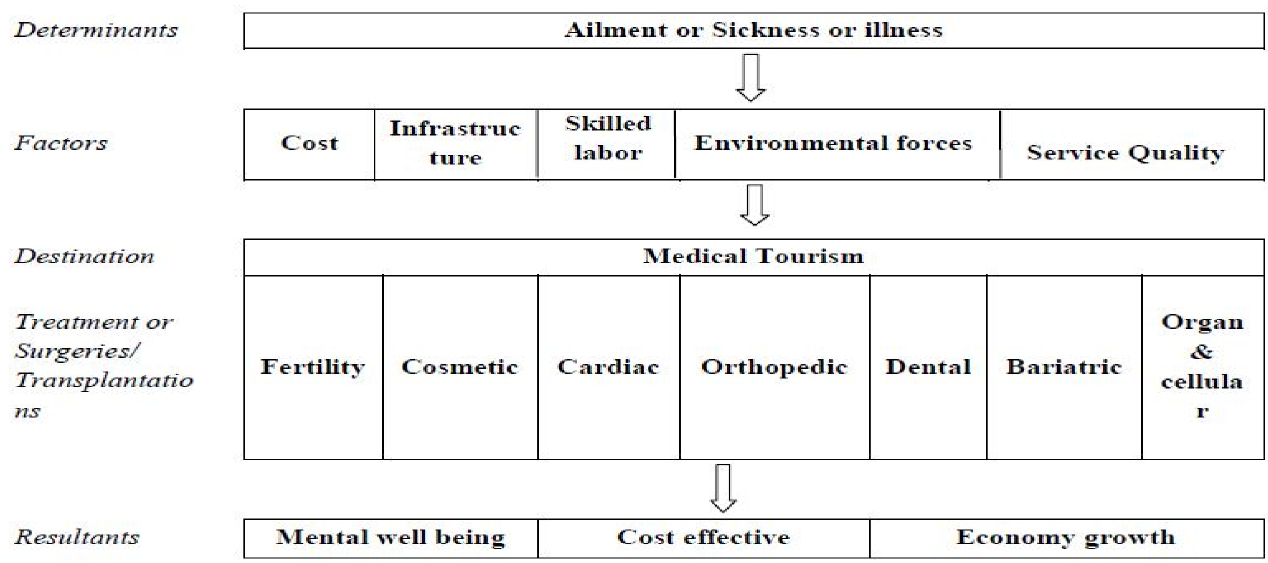
Keywords: Medical tourism, Indian economy, ICT, regional factors, skills at low cost, ayurvedic eMedical tourism.

1. INTRODUCTION

As technology has dissolved to emerging market countries, a new model of medical tourism-from rich to poor countries –evolved over the last two decades, and an increasing number of patients from developed countries have been travelling to medical centres of less developed countries in order to obtain medical services (Horowitz et al., 2007). Medical tourism in simple terms is travelling people from one country to another to seek for medical help. The term medical tourism is the act of travelling to other countries to obtain medical, dental and surgical care (Dawn & Pal, 2011). According to Goodrich & Goodrich (1987), medical tourism is the attempt by nations to attract tourists by deliberately promoting health service and facilities in addition to regular tourist amenities. Thus medical tourism emerges and offers intra- alia numerous options for touring, sight-seeing, shopping and exploring healthy diets (Jyothis, 2009).

Nowadays, the growth of the medical tourism industry usually follows the trends of general tourism as well as those of the national and/or international economy and medical tourism has a significant impact on countries' national economy as well as on the hospital budgets generating up to 10% of total revenue from international patients. According to international data, emerging markets in Asia, such as India, Malaysia, Singapore, Thailand, in Europe and Latin America are some of the most attractive and low cost medical tourist destinations.

Fig 1: A model can be developed for the people concern towards the medical tourism.



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2. REVIEW OF LITERATURE

Study says that India is growing to be the world"s best The study illustrates that India is growing to be the world's best medical tourist country because of top quality healthcare services at lower cost, expert team of professional doctors, high success rates and trust worthy medical practit i oners.

The government of India is not properly able to market the medical tourism by which majority of the medical tourists are unaware of the facilities also cross border safety, political stability and inbound tourist regulatory issues such as visa procedures etc. are hindering the growth of medical tourism.

Health tourism aims to improve tourists health status by relaxing in spa or providing alternative treatments, whereas medical tourism implies diagnosis, hospitalization and surgical operations to improve or restore health in the long term.

Health Tourism refers to the prevention, retention, treatment, recovery and restoration of health with modern medical methods or natural methods, while combining rest, relaxation and entertainment. The basic idea is the physical, mental, spiritual and emotional rejuvenation of the individual away from the daily routine in a beautiful relaxing environment.

There are three main groups of people who choose to travel abroad and stay in Health Tourism Centres (Leahy et al., 1995):

- People who choose to combine their travel on tourism and holiday. with other reasons of preventive medicine and therapeutic treatment in the mental health sector that contribute to wellness and inner balance.
- People seeking specialized medicine and in general therapeutic. Recovery treatments of temporary or chronic disabilities alongside their holidays or other forms of tourism.

3. OBJECTIVES OF THE STUDY

North Malabar being the rapidly growing city with huge infrastructural development. A lot number of new hospitals have developed recently and also the increase in the Foreign visitors. A lot of new institutions have grown up giving importance to naturopathy, yogic sciences, and traditional methods of healing, natural resorts for the tourist comfort.

The Present study tries to analyse the following objectives

- To enlighten the general information on medical tourism in India
- To know the opportunities available for medical tourism in North Malabar district.
- To analyze the issues and challenges of medical tourism in North Malabar district.
- To suggest some methods to improve the quality of medical tourism

4. METHODOLOGY

Our focus was on non-cosmetic surgery and medical treatment.

Our focus was on Ayurveda medical treatment, where primary data is collected through survey of North Malabar District region people of age group of 40 to 60. Secondary data is collected through books, magazines and journals, leading newspapers, websites and government reports. From the study on medical tourism at North Malabar, the researchers have laid down few suggestions and recommendations for the efficiency of the medical tourism including the quality of medical tourism.

This paper has recommended some of the medical tourism strategies for further promoting medical tourism in India. These include building and promoting the image of India as high quality medical tourism destination, creating and promoting new combination of medical tourism products, keeping up the high standard of quality treatments at a reasonable price, providing informative online and offline materials and make them available to the potential customers. Also attaining the accreditation/standard to reassure the quality of treatments as well as emphasizing on the needs and demands of the existing target markets must be incorporated.

5. FINDINGS

General Procedure of Medical Tourism in North Malabar Region of Kerala is given below:-

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Fig-2: Steps of Medical Tourism

The procedure begins with travel planning, hospitalization, treatment, discharge after recovery and returning to the home town.

The purpose of this study was to investigate the performance satisfaction with medical tourism in North Malabar region, Kerala. Despite the fact that the majority of the Medical Tourism executives evaluated highly the ability of local community to support medical tourism, the level of satisfaction was stated low regarding the performance of medical tourism in Kerala. An explanation behind this low rated satisfaction might be due to the executives' belief that medical tourism has not been satisfactorily exploited in a professional way in the region. Initial indications regarding the lack of eMedical tourism to be the issues of medical tourism.

Primary data is collected through survey. Through the method of convenience sampling, we have collected the data through online data collection methods of North Malabar District region people of age group of 40 to 60 for the primary data collection. 50 samples were collected as part of the survey respect to Ayurveda eMedical Tourism.

Table-1: Survey of Ayurveda eMedical Tourism in North Malabar

Sr. No	Survey Element	SD	D	A	SA
1	eMedical Tourism of Ayurvedic treatment in North Malabar region is possible to implement	2	5	23	20
2	eMedical Tourism requires training of the medical practitioners	18	24	6	2
3	Good Infrastructure like Hotels, Resorts, and Transportation available to support eMedical Tourism in North Malabar	7	8	19	16
4	We can do the digital marketing of Ayurvedic Medical services through internet and social networking	2	6	19	23
5	NRI patients can be attracted to the eMedical Tourism through Mailing list	5	6	24	15
6	Digital Display in the Airport, Travel Website or advertisement will enhance the possibility of Medical Tourism.	3	4	16	27
7	eMedical Tourism of Ayurvedic treatment will positively contribute in increasing the GDP of India in coming decade	7	10	17	14

* SD= Strongly Disagree, D= Disagree, A=Agree and SA= Strongly Agree

Survey result SD and D are considered together as Disagree and A and SA are considered together as Agree. Through our survey it is understood that eMedical Tourism of Ayurvedic treatment in North Malabar region is possible to implement. 84% of the users said that there is no need for training of the medical practitioners for the eMedical Tourism. Good Infrastructure like Hotels, Resorts, and Transportation available to support eMedical Tourism in North Malabar is agreed by 70% of the users.

6. CONCLUSION

In India, tourism companies' satisfaction level is very low for the medical tourism. In order to elevate the quality of the medical tourism there is no need of training of the medical practitioners. High class hotels have the ability and the relevant infrastructure to develop it, provided that the whole ICT infrastructure integrates successfully in the organizational fabric of medical tourism businesses. Network creation and cooperation among all relevant medical tourism stakeholders, public and private, is necessary, in order to coordinate efforts for the successful development of this particular tourism destination. Medical tourism in India should constitute an important source of national income. Since, medical tourism has been very recently prioritized in the political agenda and given that there is a positive willingness to invest in this field, further research is needed on their potential impact on the national economy.

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TRAFFIC SIGNAL MANAGEMENT USING BIG DATA, INTERNET OF THINGS AND REINFORCEMENT LEARNING

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ABSTRACT
Traffic management in India is either managed by traffic police manually or as per real-time traffic or the signals now-a-days have constant timings set on the signals and the signals automatically changes from green to yellow to red based on their preset timings. The biggest drawback of this approach is even during low traffic when the signals can change faster, it still works as per its preset timings and during high traffic when the signals should change slower, it again goes with the preset timings, which instead of controlling traffic, rather increases it. A purely automated approach is needed that can analyses the real time traffic and based on that can manage the green, yellow and red cycle automatically rather than configuring them with constant numbers. This paper suggest a way to control the traffic signal to minimize the traffic jam problem using big data analysis combined with Internet of Things (IoT) and reinforcement learning.

Keywords: real-time traffic, big data analysis, IoT, reinforcement learning.

INTRODUCTION
Existing traffic light control system has the fixed programs, which sets the traffic signals equal time duration in every cycle. In some cases, existing traffic light control systems work, though at a low efficiency. However, on working days during pick hours or on some special day when some big event organises in the city, the traffic light control systems become paralyzed. Instead, we often witness policemen directly manage the intersection by waving signals. This human operator can see the real time traffic condition in the intersecting roads and smartly determine the duration of the allowed passing time for each direction using his/her long-term experience and understanding about the intersection. The operation normally is very effective. The witness motivates us to propose a smart intersection traffic signal management system; which can take real-time traffic condition as input using IoT, stores that input using big data and learn how to manage the intersection just like the human operator using reinforcement learning.

OVERVIEW OF BIG DATA AND ANALYTICS ARCHITECTURAL PATTERNS
Following are specific patterns grouped by category.

DATA STORAGE AND MODELLING
All data must be stored. It can be stored on physical disks (e.g., *flat files*, *B-tree*), virtual memory (*in-memory*), distributed virtual file systems (e.g., *HDFS*), and so on.

Data storage systems are usually classified as being either *relational (RDBMS)*, *NoSQL*, or *NewSQL*. This designation is made based on the data model, physical storage strategy, query language, querying capabilities, *CAP* tradeoffs, and so on. Databases can also be further classified by their usage in an overall solution. Here is a list of common data storage classifications.

- Operational data store (ODS)
- Data warehouse
- Data lake
- Data mart
- OLAP and OLTP/TDS
- Master data store
- In-memory
- File system
- Distributed file system (e.g., HDFS)

Some of these systems are better suited for *transactional* and *event-driven* data storage (e.g., *OLTP*), while others are more analytics focused (*OLAP*, *data warehouse*, …).

Each type of storage typically involves one or more *data models*. The term data model describes the virtual representation of the data, as opposed to the physical representation and storage of the data, which is handled by the data management system.

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TYPICAL DATA MODELS AND SCHEMAS INCLUDE

- Relational for RDBMS systems
- NoSQL
  - Key value
  - Document
  - Wide-column
  - Graph
- NewSQL
  - Hybrid of relational and NoSQL
- Data Warehouse and OLAP
  - Star schema
  - Snowflake schema
  - OLAP cube

DATA ACQUISITION, INGESTION, AND INTEGRATION USING IOT

Data can be acquired and collected in many different ways, including physical sensor measurement (e.g, *IoT*), software transactions and events, server logging, web and mobile app usage tracking, and so on.

Acquired data is usually stored in a data storage system (i.e., *database*) of some sort, and may also need to be *ingested* into a data pipeline and ultimately another data store (e.g., *data warehouse*). The data may also need to be combined (*integrated*) with data from other sources as well.

Once data has been generated physically by sensors or by software code, data can be ingested into a database or data pipeline in a variety of ways. Here is a list of some common data architectural patterns.

- Messaging and message queues
  - Using patterns like *message oriented middleware (MOM)*, *pub/sub*, …
- Query-based (i.e., query and extract data from other data sources)
- Event-based
- APIs
- *Change data capture (CDC)*

In some patterns, data is *pushed* to a database or pipeline using an event-based messaging system or through API calls, whereas in others data is *pulled* by querying other data sources.

DATA AVAILABILITY, PERFORMANCE, AND SCALABILITY

Once data is stored, applications and/or end users will likely need to access it. Three of the most important requirements of a data system, at the solution level, and depending on the expected load on it, are *availability*, *performance*, and *scalability*. These three requirements are related and have impacts on one another.

Availability says that every request receives a response, without guarantee that it contains the most recent version of the information. It is implied that availability here refers to database nodes that are in a non-failing state, and that return requested information as opposed to an error.

Performance is a term used to describe the speed by which data operations (e.g., read, writes, …) are executed successfully. Research has shown that slow application speeds can cause significant losses in revenue, as well as degrade customer's experience and satisfaction, ultimately leading to customer abandonment and churn. Highly performant systems are therefore very important.

Lastly, *scalability* refers to the system's ability to maintain a certain degree of availability and performance regardless of the load (e.g., concurrent user requests) imposed on the system. There are many architectural patterns used to address these three requirements. Here is a list of some of them.

- Shared nothing and shared *
- Replication

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- Distributed and parallel computing and storage
- Load balancing
- Horizontal and/or vertical scaling

DATA PROCESSING AND MOVEMENT

Data processing is a stage of the data pipeline that involves data cleaning, dealing with missing or bad values, transformations, metrics calculations, and so on.

Typically, data processing is categorized as either *batch*, *real-time*, *near real-time*, or *streaming*. Batch processing involves processing data in a batch either as a single job or recurring process and is not usually a very fast process depending on the amount of data involved.

Real-time processing on the other hand deals with processing data as it moves through the data pipeline in real-time, and often the data moves directly from the processing stage into presentation of some sort (dashboard, notification, report, …), persistent storage, and/or as a response to a request (POS CC approval, bank ATM transaction, …). *Real-time* processing is characterized by very fast processing where minimal time delays are critical.

Near real-time (NRT) processing on the other hand, differs in that the delay introduced by data processing and movement means that the term *real-time* is not quite accurate. Some sources differentiate *near real-time* as being characterized by a delay of several seconds to several minutes, and where the delay is acceptable for the given application.

The data processing stage can be accompanied by a data movement stage, which is usually called *extract transform load (ETL)*, or *extract load transform (ELT)* depending on the situation. In the case of *ETL*, data is extracted from one or more data sources, often loaded into temporary storage (*staging*), transformed by processing logic, and then loaded into the data's final storage place.

The final data store is usually a *data warehouse*, *data lake*, *OLAP* system, or analytics database of some sort.

Figure-1: source: https://www.innoarchitech.com/scalable-software-big-data-analytics-architecture-architectural-design-patterns/

DATA ACCESS, QUERYING, ANALYTICS, AND BUSINESS INTELLIGENCE (BI)

We finish the data architecture discussion with patterns associated with data *access*, *querying*, *analytics*, and *business intelligence*.

Data isn't useful if it's generated, collected, and then stored and never seen again. Most data contain very useful information that can be extracted in order to gain actionable insights, drive business decisions, make predictions and recommendations, and so on.

Data is typically accessed by creating a *connection* to a datastore, *querying* the data (e.g., using *SQL*) to retrieve a specific *subset* of it, and then finally performing analytics of some type on the data. Analytics can be in the form of *statistical analysis*, *data visualization*, *machine learning*, *artificial intelligence*, *predictive analytics*, and so on.

Business intelligence refers to the extraction of useful information from data to drive business decisions that help achieve business goals. Usually business intelligence is carried out using a so-called *BI tool*, which is software that can connect to different data sources in order to query, visualize, and perform analysis on data.

Typical job roles that carry out the described analytics tasks depends on the complexity (statistical, mathematical, and algorithmic), and amount of computer programming required. Usually *data scientists* perform very technical analytics tasks that require significant programming, whereas roles with a variation of an *analyst* title (e.g., *data analyst*) usually leverage business intelligence tools (Excel, Tableau, Looker, …).

Here is a list of some common architectural patterns in this category.

- Distributed and parallel querying, processing, and analytics (e.g., Apache Spark)
- Access patterns, languages, and tools
  - Structured query language (SQL)
  - MapReduce
  - Spark resilient distributed datasets (RDD), SparkSQL, and Spark DataFrames
  - Hive
  - Pig
  - Impala
  - Sqoop
- Processing categories
  - Streaming
  - Real-time
  - Near real-time
  - Batch
- Analytics types
  - Descriptive
  - Predictive
  - Prescriptive
  - Business intelligence (BI)[1]

REINFORCEMENT LEARNING

Reinforcement learning is an area of Machine Learning. It is about taking suitable action to maximize reward in a particular situation. It is employed by various software and machines to find the best possible behaviour or path it should take in a specific situation. Reinforcement learning differs from the supervised learning in a way that in supervised learning the training data has the answer key with it, so the model is trained with the correct answer itself whereas in reinforcement learning, there is no answer, but the reinforcement agent decides what to do to perform the given task. In the absence of training dataset, it is bound to learn from its experience.

MAIN POINTS IN REINFORCEMENT LEARNING –

- Input: The input should be an initial state from which the model will start
- Output: There are many possible output as there are variety of solution to a particular problem
- Training: The training is based upon the input, The model will return a state and the user will decide to reward or punish the model based on its output.
- The model keeps continues to learn.
- The best solution is decided based on the maximum reward.

TYPES OF REINFORCEMENT

There are two types of Reinforcement:

1. Positive

Positive Reinforcement is defined as when an event, occurs due to a particular behaviour, increases the strength and the frequency of the behaviour. In other words, it has a positive effect on the behaviour.

Advantages of reinforcement learning are

- Maximizes Performance
- Sustain Change for a long period of time

Disadvantages of reinforcement learning

- Too much Reinforcement can lead to overload of states which can diminish the results

2. Negative

Negative Reinforcement is defined as strengthening of a behaviour because a negative condition is stopped or avoided.

Advantages of reinforcement learning

- Increases Behaviour
- Provide defiance to minimum standard of performance

Disadvantages of reinforcement learning

- It Only provides enough to meet up the minimum behaviour

Various Practical applications of Reinforcement Learning –

- RL can be used in robotics for industrial automation.
- RL can be used in machine learning and data processing
- RL can be used to create training systems that provide custom instruction and materials according to the requirement of students.

RL can be used in large environments in the following situations

1. A model of the environment is known, but an analytic solution is not available;
2. Only a simulation model of the environment is given
3. The only way to collect information about the environment is to interact with [2]

CONCLUSION

Including reinforcement-learning technology, to IoT and Big data technology to solve traffic signal problem can bring the noticeable difference towards the improvement.

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V-CANE: A SMART STICK FOR VISUALLY IMPAIRED PEOPLE

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ABSTRACT
Visually impaired people find it difficult in moving with ease in the places which is unfamiliar to them or to the places which are frequently visited. To assist them in such places, generally they take the help from human guide or in such situations they make use of manual cane which assists them in path navigation so that the collision could be prevented. Manual cane has its own drawbacks and it is highly unreliable. Hence the main aim of this paper is to propose a solution and develops an intelligent walking system which will help visually disabled individuals by providing better navigation. Our system uses an ultrasonic sensor with buzzer and vibrator which raises an alarm and alerts the individual whenever an obstacle is detected within its detection range. The proposed solution is very cost effective and also light weighted which makes it available to all segments of the society who needs it.

Keywords: Intelligent walking system;Embedded systems; Vibrator;Arduino Uno;Ultrasonic Sensor;Vibrator;

I. INTRODUCTION
According to World Health Organization statistics [10], an estimated of more than 285 billion people live with visual impairment. Most of them are using a traditional white cane to aid in navigation. The major drawback in this type of system is that the information is gathered as soon as the objects are touched by the tip of the cane. The traditional length of a white cane depends on the height of user and it extends from the floor to the persons sternum.

Visually challenged people live a very challenging life. They find it difficult to move in the changing world. Because of this, they are forced to bring in either a human guide or rely on dogs to assist them in navigation. More than half of the legally visually challenged people in the world are unemployed and are forced to depend on the earning members within the family for financial support. Due to all this drawbacks, their social life is also disturbed and communications rarely happens in the daily routine. In early days, systems are designed with the intention of providing assistance in navigation for little or no understanding of non-visual perception. Some of these systems are best suited for indoor navigations and have several drawbacks when exposed to the outside world. Hence there is a need of smart intelligent systems which will assist visually challenged people in detecting the obstacles on their way and give precise information about their location. Various researchers around the world are currently working on several such intelligent systems to bring ease of navigation in the lives of visually disabled people.

II. LITERATURE REVIEW
A comprehensive review of various approaches for design of smart intelligent stick for assisting navigation for visually challenged people are considered. Rashidah F. [1] proposes to develop a smart stick which uses different sensors such as water and ultrasonic to detect obstacles and it is provided with a buzzer which activates when water is detected. The experimental analysis on the stick is done and it has been concluded that the overall efficiency amounts to 90% when water is detected and 85.75 percent when wireless Remote control is used. The stick can be located if misplaced by RF wireless Remote Control.

Ayat[2] proposes to build a smart stick which is cost effective, light weighted, cheaper, user friendly cane which is based on infrared technology. The cane makes use of a pair of infrared sensors which can detect stair-cases and other obstacles easily, within a range of two meters. The experimental result produced in the paper achieves good accuracy and the stick is able to detect all of obstacles. In this paper, the experiments were tested on eight different obstacles by a group of visually challenged persons. On conclusion of the experiments, it was observed that the stick touch the edge of the obstacle in certain cases but it was considered as unintended error.

Gita[3] proposes to build a cane which helps them to detect the location of the destination building or informs them their current position through voice commands. The model makes use of GPS module, keypad, earphone and raspberry Pi kit. The system will make the visually impaired less dependent on asking people and finding the destination area more accurately as otherwise. A thorough experiment is done on the prototype and it has been observed that it can detect location of interest with a slight deviation within the range of 8m. The prototype though is working in a fair category needs some improvement especially in detecting location. The proposed prototype needs to enhance the accuracy and connect it to the map system to help blind as a tool which is simple and portable.

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Saaid [4] attempts to develop a smart cane based on distance measurement system. The ultrasonic sensor acts as an input to the system and the output is generated on the earphone connected to the system. The distance between the obstacle and the user is measured by using ultrasonic sensor. The data is redirected to myRIO-1900 controller for processing which is used to produce a beeping sound as the output. The results produced during experiments produces decent level of accuracy and can be used by the visually challenged people.

Giva [5] proposes to design a prototype named “Smart Guide Extension” which can detect obstacles, holes and give information about eights wind direction using Arduino. The system uses 2 PING Sensors and CMP compass sensor 511.

The system compares itself with all of the other currently available systems and proposes to be much more accurate and user friendly as compared to other similar gadgets. Sharada[6] proposes to detect obstacles as well as terrain changes in the user’s direction. The system uses ultrasonic sensors to detect the obstacles in the path of the user and also provide the provision to indicate presence of puddles and slippery surface along the user’s path.

Ashraf’s [7] research work tend to focus on developing a smart stick which will not only detect the obstacles in front of visually challenged people but also help them in identifying the world around them while walking. The system makes use of ultrasonic sensor, fire sensor, water sensor and light sensor. Arduino Uno microcontroller is used to receive the signals generated from each of the sensors given above and processes them in form of short pulses which is then re-directed to Arduino pins where buzzers, vibrators and voice alarms are configured. Earphone is used as an output module to assist the visually challenged person to reach to their destination safely.

Rajesh [8] propose to develop a cane for visually challenged people a better walking experience. The stick makes use of Bluetooth enabled Obstacle detection module. It is also provide support for heat detection and is currently provide support with haptic module. The obstacles are detected by making use of ultrasonic sensors and distance between user and obstacle is sent via Bluetooth. The researchers have added haptic module to warn the user of moving obstacles with the help of vibratory motors. Muhammad [9] developed a intelligent assisting stick which is capable of detecting obstacles within the range of 300m. The cane provides live tracking and signal receptor services. The only drawback of this stick is the cost which is slightly at the higher side.

III. THE PROPOSED SYSTEM

A. Construction

As shown in figure 1, the frame of cane is made up of hard plastic pipes and connectors. Plastic material is used considering the weight of the cane should be lighter. The connectors are used so that the stick can be folded for easy handling and portability. A small aluminum box is passed through the pipe and stuck at the knee length which holds the sensor, battery and the microcontroller. At the top of the stick angular pipe connector is attached on top of which the slide switch is attached. Jumper wires and ribbon wires are used more connecting the components in the system. The wires are passed through the pipe for safety purpose. The vibrating motor is stuck directly to the stick so that it can be immediately sensed. The system is given power supply through rechargeable battery.

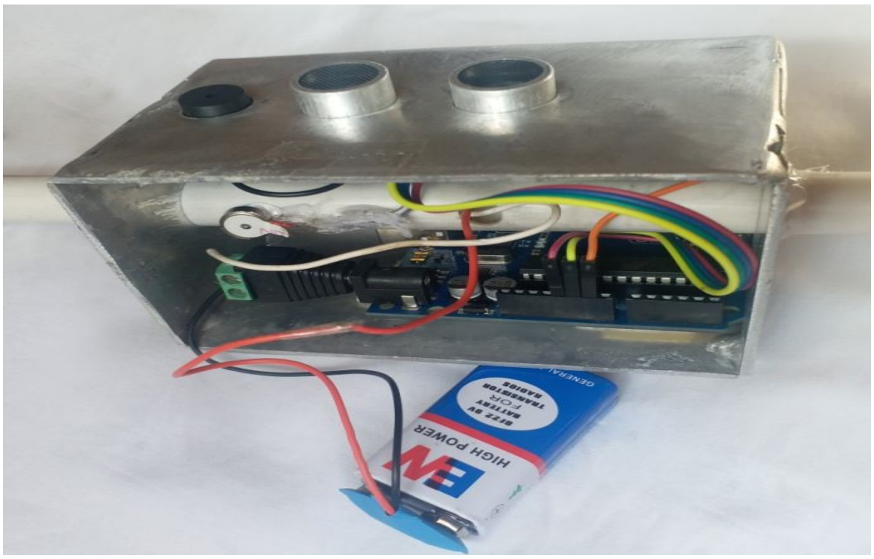

Fig-1: Construction architecture of our system

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B. Module Description and working

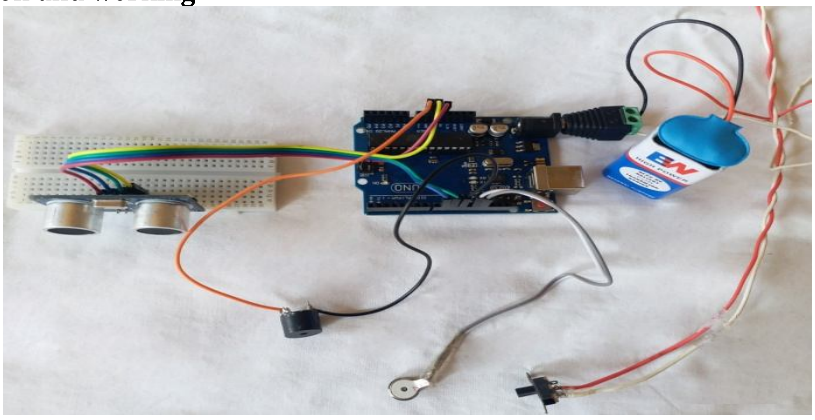

Fig-2: Top View of our system

As shown in figure 2, Arduino Uno microcontroller board is used which is based on ATMega 328 microchip. This microcontroller board is chosen for easy availability of various input and output pins. The board has 14 Digital pins, 6 Analog pins and a type B USB cable for Programming. The system is programmed using Arduino IDE software as it enables the use of various inbuilt library functions. The system can be powered using a USB cable or an external 9volts battery.

The HC-SR04 ultrasonic sensor is being used for obstacle detection. It has a detection range from 2cm to 400cm. This module is energy efficient and has an operating voltage of 5V. The time taken by the ultrasonic wave to return to the detector after reflection can be determined using the time duration for which the Echo signal from the sensor remains high. The distance of the obstacle from the user is then converted to centimeters. The small and compact coin type vibrating motor and piezo buzzer is used for alerting when obstacle is detected within range. The ultrasonic sensor, buzzer and vibrating motor is connected to the Arduino Uno board as shown in figure 2.

C. Circuit diagram

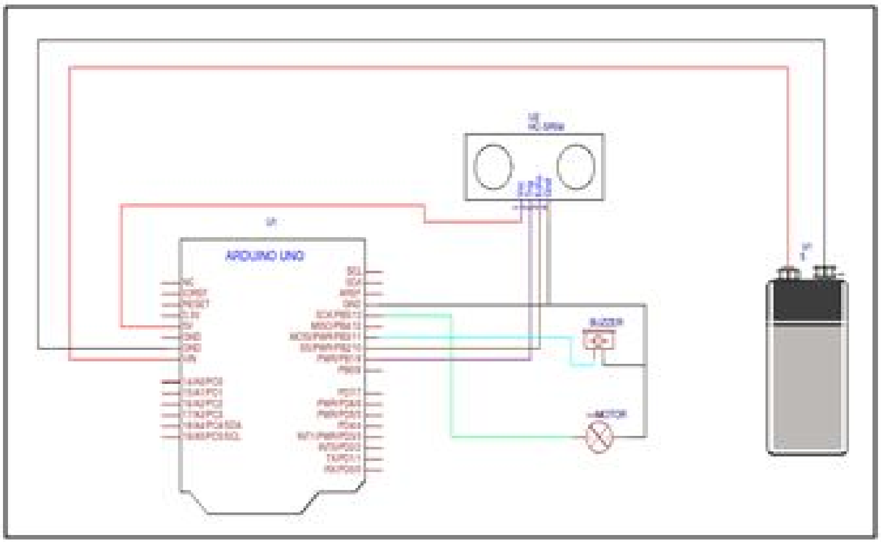

Fig-3: Circuit diagram of our system

As shown in figure 3, the Vcc pin of the ultrasonic sensor is connected to 5V pin of Arduino Uno. Trigger pin of the ultrasonic sensor is connected to pin number 9 of Arduino Uno and Echo pin is connected to pin number 10 of Arduino Uno. GND pin of the ultrasonic sensor is connected to pin number GND of Arduino Uno.

Positive (+) terminal of buzzer is connected to pin number 11 and Negative (-) terminal is connected to pin GND of Arduino Uno.

Positive (+) terminal of vibrating motor is connected to pin number 13 and Negative (-) terminal is connected to pin GND of Arduino Uno.

IV. METHODOLGY

The figure below shows the basic working of the system. The system is embedded with an ultrasonic sensor for obstacle detection, Arduino Uno micro controller, buzzer, motor and a toggle switch.

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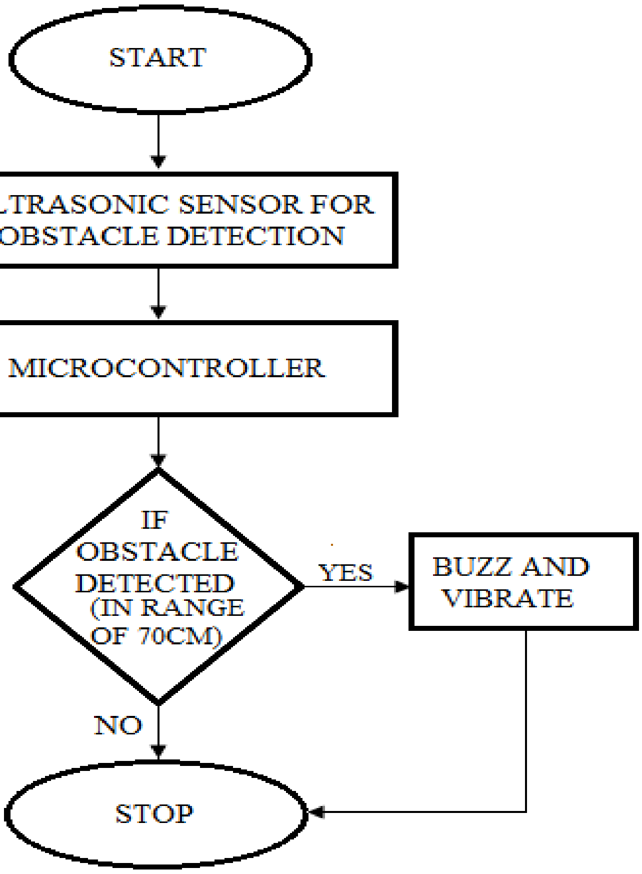

Fig-4: Flowchart of system

The ultrasonic sensor HC-SR04 is used for obstacle detection. The sensor emits sound waves at a specific high frequency and waits for the sound to be reflected back. By recording the elapsed time, the distance is calculated. It is known that sound travels through air at about 344m/s. So the distance travelled can be measured by the product of speed of sound and the time taken by sound wave to travel from sensor to the object. It is a round trip from sensor to the object and back to the sensor; hence the time taken is divided by 2.

$$Distance = \frac{\text{Speed of Sound} \times \text{Time taken}}{2}$$

The system is has a slide switch by which the system can be put on or off according to the user's need. Switching on the system will boot up the system and the device starts functioning in a few seconds. If any obstacle is detected by the sensor, the data is passed to Arduino Uno microcontroller. The microcontroller than processes this data and calculates if the object detected is within the specified range. If any object detected is within the specified, the signals will be passed to the buzzer and motor to alert the person. The Buzzer will beep and the motor will start vibrating as the object gets closer to the sensor. For this research project, the distance was set to 70cms.

V. RESEACH FINDING AND ANALYSIS

To evaluate the efficiency of the system, the system was tested on two visually impaired students in a closed room and obstacles were placed. The system was tested again in open space in the building by two other visually impaired students. The experience of the user was noted and there feedback was taken in to account.

Results

- Simple and easy to navigate
- Movements were free and normal
- Confidence in moving around independently
- Guidance is required when using elevators.
- Comfort while moving up and down the stairs

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VI. CONCLUSION

The proposed system if implemented correctly with greater accuracy will help the visually challenged people to move from one location to another without any human guide for navigation which also increases autonomy for them. The proposed system makes use of several sensors which will assist them in identifying any obstacles in its path of navigation. The proposed prototype given decent results in detecting the obstacles which is at some distance along its path of motion.

The developed smart stick that is incorporated with multiple sensors will help in navigating the way while walking and keep alarming the person if any sign of danger or inconvenience is detected.

The developed prototype gives good results in detecting obstacles paced at distance in front of the user; it will be real boon for the blind. At the same time global positioning system (GPS) can be linked with the voice stick for navigation, so that person can know his current position and distance from the destination which will be informed to users through voice instructions.

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VIRTUALIZATION ADVENT OF CLOUD COMPUTING

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ABSTRACT
In this internet world everyone uses Cloud Computing. Cloud Computing is the use of hardware and software to deliver a service over a network (typically the Internet). With cloud computing, users can access files and use applications from any device that can access the Internet. Virtualization is backbone of cloud computing. Virtualization is being used by number of organizations to reduce power consumption, Server Consolidation, Development and Testing, Dynamic Balancing and Recovery, Virtual Desktops and Improved System Reliability and Security. In this paper we see detailed review on virtualization.

Keywords: Cloud computing, Virtualization, Internet, Hardware, Security.

1. INTRODUCTION

Virtualization is the creation of virtual. Such as an operating system or a server or a storage device or network resources. In another words we can say virtualization is a technique, which allows sharing a single physical instance of a resource or an application among multiple customers and organizations. A logical name to physical storage. It is providing a pointer to that physical resource when demanded.

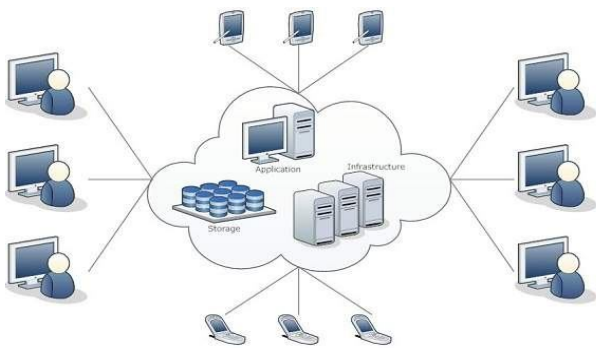
By using virtualization software we can operate multiple operating system on your same hardware with host operating system. For example your host operating system is windows 7 and you want to windows XP or Linux then by using virtualization you can use both OS.

It is the the use of various services, such as software development platforms, servers, storage and software, over the internet, often referred to as the "cloud." The main advantage of the cloud computing is that it reduces the cost effectiveness for the implementation of the Hardware, software and License. Cloud computing advancements are closely related to virtualization. Virtualization in cloud computing allows you to run multiple applications and operating systems on the same server, thereby providing for efficient resource utilization and reducing costs The ability to pay on demand and scale is largely a result of cloud computing vendors being able to pool resources that may be divided among multiple clients.

Cloud computing services as infrastructure as a service, platform or software .

2. DEFINITION OF CLOUD COMPUTING

Cloud refers to a Network or Internet. Cloud means which is present at remote location. It can provide services over public and private networks. They are LAN, WAN or VPN. Its applications such as e-mail, web conferencing, customer relationship management (CRM).It refers to manipulating, configuring, and accessing the hardware and software resources remotely. It offers online data storage, infrastructure and application.



It offers platform independency, as the software is not required to be installed locally on the computer. Cloud Computing is making our collaborative and business applications mobile. It services are first offered by Amazon, Google, Microsoft and now many are existing organization. These services are used by government sectors, software industries and health care sectors and in many more fields. The main power of cloud computing between the way data is stored how it is transmitted and accessed. A virtualized platform with management capabilities like automated load balancing, availability and fault tolerance reduces infrastructure cost and maintenance cost.

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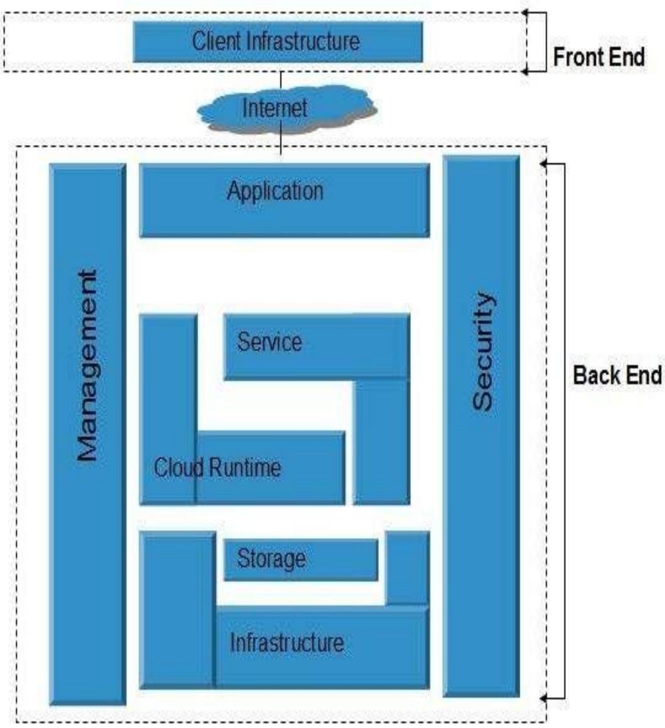
3.1 CLOUD COMPUTING ARCHITECTURE

This architecture comprises of many cloud components which are loosely coupled. We can divide into two parts

Front End

Back End

In cloud computing architecture each of the ends is connected through a network that is internet. This diagram shows the graphical view of cloud computing architecture:



Front End

It refers to the client part of system. Front end consists of interfaces and applications that are required to access the cloud computing platforms. Example of front end is Web Browser.

Back End

It refers to the cloud itself. To provide cloud computing services back end consists of all the resources required. It comprises of huge data storage, security mechanism, services, deployment models, virtual machines, servers, etc.

Cloud infrastructure consists of servers, network, storage devices, deployment software, cloud management software, deployment software, and platform virtualization.

3.2 TYPES OF VIRTUALIZATION

Virtual Machine is an abstraction layer or environment between hardware components and end users. Virtual machine is a virtual computer system having software container with an operating system and application inside. The machine provides an environment that is logically separated from the underlying hardware that is virtual machine. The virtual machine is referred as a Guest Machine and that machine on which the virtual machine is going to create is called as Host Machine.

Hardware Virtualization

We can say that hardware virtualization means when the virtual machine software or virtual machine manager (VMM) is directly installed on the hardware system. The main job of hypervisor is to monitor the processor and control, memory and other hardware resources. We can say hypervisor is software program that manages one or more virtual machine. It is a firmware or low-level program that acts as a Virtual Machine Manager. It allows sharing the single physical instance of cloud resources between several organizations. The connection between virtual parts and physical parts is very important in a cloud computing environment. By using virtualization of hardware system, we can install different operating system on it and run different applications. It's usage for the server platforms, because controlling virtual machines is much easier than controlling a physical server. Virtualization takes place on host machine; guest machine is the virtual machine.

Operating System Virtualization

Operating system virtualization means when the virtual machine software or virtual machine manager (VMM) is installed on the Host operating system instead of directly on the hardware system. It is mainly used for testing the applications on different platforms of OS.

Server Virtualization

Server virtualization means when the virtual machine software or virtual machine manager (VMM) is directly installed on the Server system. It is done because a single physical server can be divided into multiple servers on the demand basis and for balancing the load.

Storage Virtualization

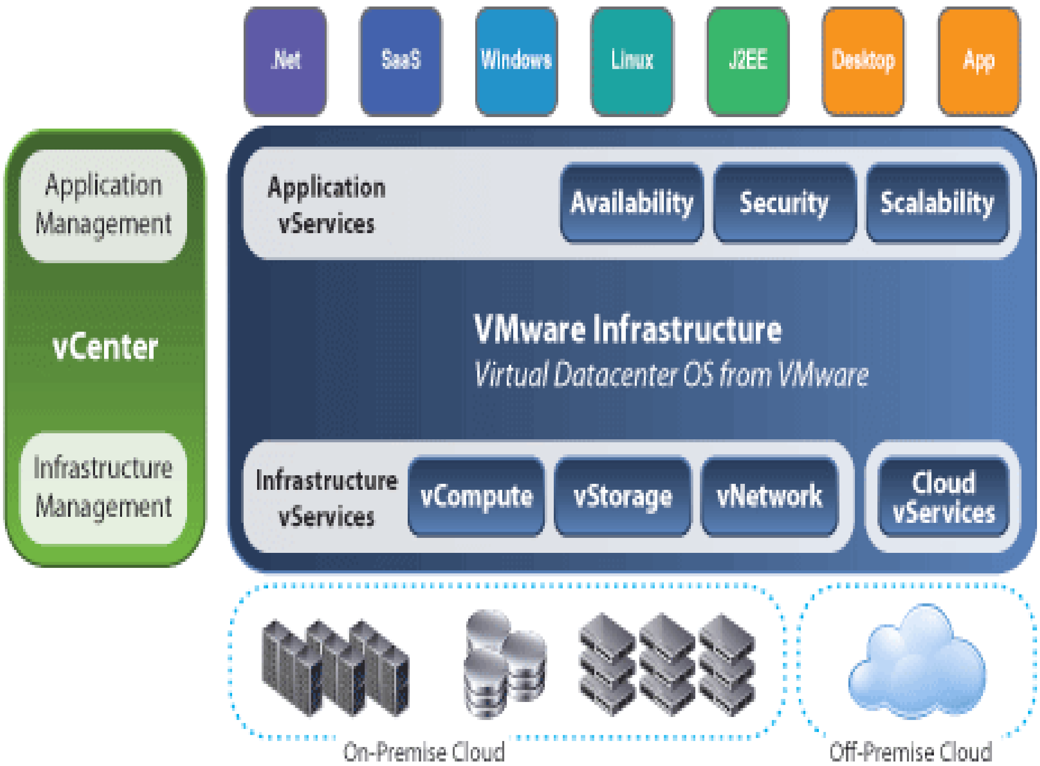
It is the process of grouping the physical storage from multiple network storage devices so that it looks like a single storage device. It is also implemented by using software applications. It is mainly done for back-up and recovery purposes.

Desktop Virtualization

Desktop virtualization is refers to separating the logical desktop from physical machine.

4. HOW DOES VIRTUALIZATION WORK IN CLOUD COMPUTING

It plays a very important role in the cloud computing technology normally in the cloud computing .Cloud computing user's share the data present in the clouds like application. Users share the Infrastructure using the virtualization. The main usage of virtualization in cloud computing is to provide the applications with the standard versions to their cloud users. Means suppose if the next version of that application is released, then cloud provider has to provide the latest version to their cloud users and practically it is possible. But it is more expensive. To overcome this problem we use basically virtualization technology all severs and the software application which are required by other cloud providers are maintained by the third party people and for these cloud providers has to pay the money on monthly or annual basis.



5. Advantages of virtualization in cloud computing

It is save the cost for a physical system such as hardware and servers. It is also increases the security of cloud computing by protecting both the integrity on guest virtual machine. And cloud components virtualized machines can be scaled up or down on demand and It can provide reliability. In virtualization in cloud computing, the virtual server and retrieve anytime for data transfer.

Technical problems can solve in physical systems using with the help of its that is virtualization in Cloud Computing. It solves the problem of recovering the data from corrupted or crashed devices so that it saves time.

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6. CONCLUSION

From above we can conclude that every technologies having lots of advantages and disadvantages. As a nowadays new technology comes but we cannot push the one concept back and new one is current or highlighted. To know cloud computing first we have clear concepts of virtualization and its nature of creating virtual machine. it is very difficult to realize the cloud computing concept without virtualization.

Companies can implement cloud computing. Virtualization is backbone of Cloud Computing. It is an important aspect in cloud computing and can maintain and secure the data.

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E-WALLET: A SIGNIFICANT WAY TOWARDS A CASHLESS SOCIETY

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ABSTRACT
The world is moving towards cashless transactions so do India. As a part of Digital India, Government has strived to provide better end - to - end transactional experience for a citizen, businesses as well as internal government functions, which includes accessing various services through internet with payment gateway interface for online payments. All this forms basis for Digital India which emphasis on cashless, faceless, paperless arena. Promotion of digital payments has been accorded highest priority by the Government of India to bring each segment of our country under digital payment services. The Vision is to provide facility of seamless digital payment to all citizens of India in a convenient, easy, affordable, quick and secured manner. E-wallet is a digital device which allows an individual to make cashless payment and can be linked to individual's bank account. It is a type of Electronic card which is used for transactions made online through a computer or a smart phone and therefore can be effective to help achieve cashless society.

Keywords: Digital India, Cashless Society, online Payment, E-wallet.

1. HISTORY
Online payments replaced the whole traditional Payment procedure. Traditional Payments which made no use of Internet for transaction processing and are also called as offline Payments which are still popular amongst the retail outlets and traditional stores. The advantages of Offline Payment are:

1. These payments do not require internet and hence it is not dependent on technology.
2. Payments made through cash are immediate therefore no lag time required.
3. Offline payments for example Cheque payment happens from the individual's account. Hence it is direct in nature.

Disadvantages
1. The accessibility of these payments limits individual to only conduct payments during working hours.
2. Individuals might be subject to fraud as offline payments do not offer strong security features.

Considering the disadvantages, cashless economy came in picture to overcome the loopholes of Offline Transaction. And hence it gave birth to Online Payment System. This system came in the year 1994. Online Payment System almost replaced the traditional payment system by making use of Internet. Its security mechanism also ensures the safe way to transact online. Cashless Economy has many benefits for the consumers as well as for the Government. To name few, saving cost in currency printing, no Physical theft, Time saving, environmentally friendly, less burden on Income Tax Department etc.

2. INTRODUCTION
To transform India into digitally empowered society, Government of India organised Digital India Program. Cashless society is one of the initiatives taken by digital India. A society where no physical cash is in circulation is a cashless society. Payments are made through credit and debit cards, bank electronic fund transfers or virtual wallets. As part of promoting cashless transactions and converting India into less-cash society, the Central Government has decided on a package of incentives and measures for promotion of digital and cashless economy in the country. For example, 0.75% discount on petrol/diesel online payment, 0.5% discount to customers for booking monthly or seasonal tickets at railways, discount of 10% for payment of toll at toll plazas on National Highways etc. In the current scenario, people prefer digital payment over cash payment. There are several modes of digital payments which are as follows:

1. Banking Cards (Credit/Debit)
2. E-Wallets
3. Internet Banking
4. Mobile Banking
5. Micro ATMs etc.

As the necessity for online payment increased thus increasing the means of doing it. We have considered e-wallet system as one of the easiest as well as safest way of online payment transaction. An E-wallet is a way to carry cash in digital format. We can link our credit card or debit card information in mobile device to e-wallet application or we can transfer money online to E-wallet. Instead of using physical plastic card to make purchases, we can pay with our smartphone, tablet, or smart watch. An individual's account is required to be linked to the digital wallet to load money in it. Most banks have their e-wallets and some private companies like Paytm, Freecharge, Mobikwik, Oxigen, mRuppee, Airtel Money, Jio Money, SBI Buddy, itz Cash, Citrus Pay, Vodafone M-Pesa, Axis Bank Lime, ICICI Pockets, SpeedPay etc.

3. WORKING

E-wallet was introduced in order to replace the traditional payment system. There are 3 categories of e-wallet in India as per the RBI guidelines.

1. **Closed System Payment Instrument:** Here Consumer gets a voucher or points which they can redeem only at the same Merchant outlets. These facilities have an expiry date.
2. **Semi-Closed System Payment Instruments:** It is a type in which cash is saved in terms of Points or Coins. It is locked with the merchant so consumer cannot link to his/her bank account.
3. **Open System Payment Instruments:** These are payment instruments which can be used for purchase of goods and services and also permit cash withdrawal at ATMs.

Mobile wallets are virtual storage vault, which can be used to pay at the participating locations with a single touch, and thus to some extent eliminates the Two factor authentication.

As a Consumer, when you load money in your wallet, you are trusting the wallet provider with your money as the money is debited from your account and you no longer have control over it. The money that is shown on your mobile is just a digital representation.

Mobile wallet money is just a digital representation; the actual money is with the service provider. The wallet service provider has one bank account and ledger type system which keeps all record of the wallet holder and the corresponding amount in it. So, when we transfer, say ₹500 to merchant's wallet, the money is debited from our account and credited to Merchant's bank account and the ledger is updated simultaneously.

When we transfer money from the wallet to bank account, the bank will debit from Merchant's account and credit to our account. E-Wallet provides the ability to store multiple credit cards, debit cards and back account information for making faster payments.

4. ADVANTAGES & DISADVANTAGES

Following are the advantages of e-wallets

1. **Lower Costs:** Digital wallets removes the need for intermediaries. Purchases in-store may no longer require a cashier because the purchasing process becomes as simple as a tap or scan of a mobile device.
2. **Competitive Advantage:** Digital wallet applications provide a more convenient transaction processing method for customers, giving businesses that employ this technology a competitive edge in the market.
3. **Modern:** Traditional cash-only businesses can now accept debit and credit cards. This opens up an entirely new aspect to payment methods in large markets, introducing many business opportunities and greater potential revenue.
4. **Convenience:** Users are able to get through a purchase in mere seconds with a simple tap or scan of their mobile device. The experience of purchasing items becomes quicker and easier - leading to a greater sense of satisfaction.

Following are the disadvantages of e-wallets

1. **Investment:** The initial monetary investment for building a functional digital wallet application is quite large. It requires the initial development of the software as well as the continual maintenance, updates and fixes associated with it.
2. **Support Technology:** There are few supporting technologies to choose from at the moment, with NFC terminals and phone readers being the most prevalent. In the case of digital wallets, they can only function with a corresponding hardware device for each application.
3. **System Outages:** Information for digital wallets are stored on the cloud of business servers; therefore, the risk of a system malfunction or shut down is always present.

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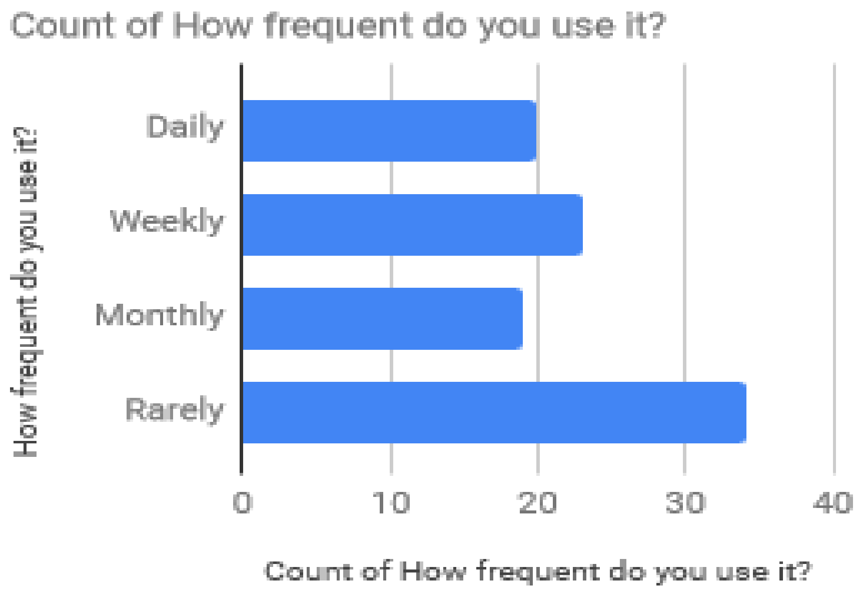
4. **Security:** Companies must ensure that their customers' information is encrypted and well protected. One of the biggest concerns of adopting a digital wallet application is "will my information be safe"? This is the hurdle that companies must face and as a result, must develop security systems that are as safe and full proof as possible to avoid potential security issues.

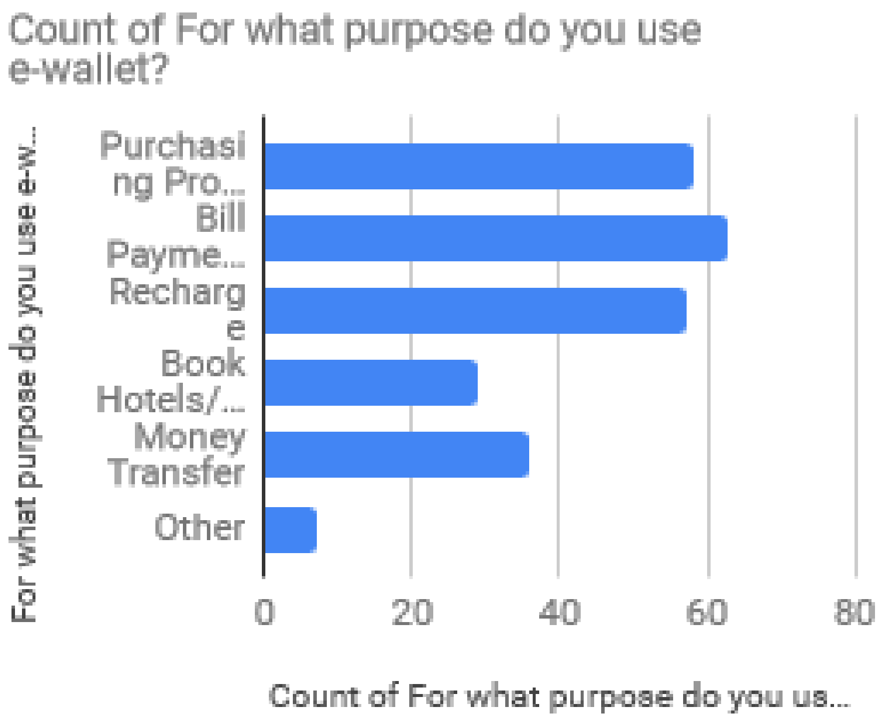
5. **SURVEY AND ANALYSIS**

The survey was conducted by means of google form amongst 100 respondents of Mumbai city in order to find out the popularity of E-wallet system. The respondents were from varied age groups and economic status. Respondents were supposed to select age group and answer whether they use E-wallets for online payment. It was recorded that age group 55 above are hardly using E-wallet. Out of 100 respondents 73% of respondents are using E-wallet.

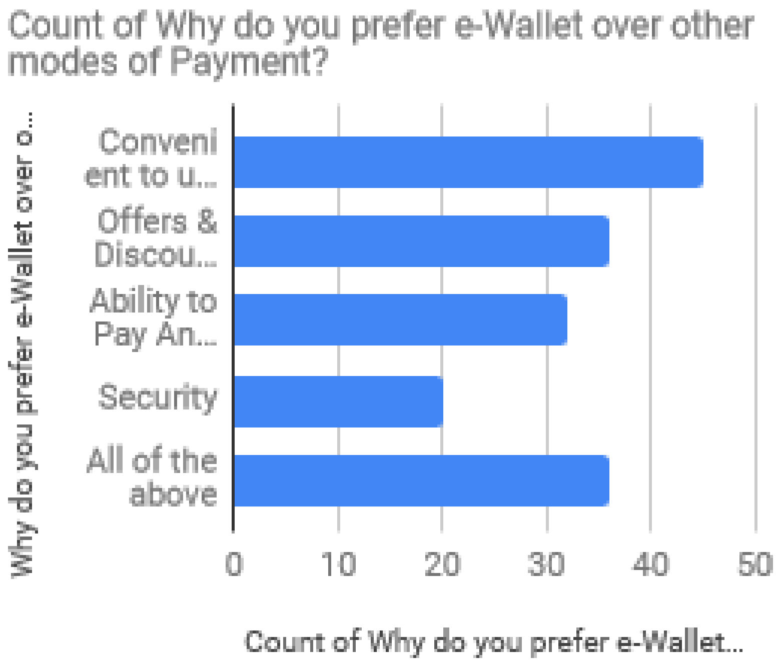
Following diagram shows the answers by respondents on the questions like frequency, purpose and reason for using E-wallet services.



Even though it is seen from the above diagram that majority people rarely uses E-wallet service, there are many people using E-wallet monthly, weekly and also daily.



On asking the reason behind using E-wallet it is observed that people majorly use it for Bill payments. For purchasing goods and recharges also it is used by people in a large scale.



There are various reasons for people to use E-wallet as a mode of payment. The most preferred reason is convenience. People even find offers and discounts valid reason to choose E-wallet over other modes.

6. CONCLUSION

It is observed that E-wallet is rapidly gaining acceptance and mode of payment has significantly changed from cash payment to cashless payment. People get attracted with the offers and discounts by E-wallet companies and soon they start understanding the benefits of using this cashless and hassle less mode of payment. This one touch payment system is not only attracting the customers but also merchants are finding it cost effective as it costs much lower than the card-based payment system. Since E-wallet is getting popular day by day, in the forthcoming years it will be used by majority of the people as they have started understanding the convenience, they experience by online transactions plus it is one of the secure modes of payment. It can be concluded that online payment system especially E-wallet is pulling majority of the crowd towards cashless society.

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ROLE OF ANALYTICS IN EDUCATIONAL SYSTEM

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ABSTRACT

Education today what can be seen is, every other second a student drops out of college or school – the reason may vary from person to person including poor academics, financial conditions and many other reasons. This reality does not depict a bright and successful future of education.

Our project is based on Implementation of Data Analytics with Business Intelligence in education sector. The purpose of this paper is to illustrate the ways in which the education institutions can use the current IT trends and achieve better results and generate better learning outcomes out of students.

In this paper we propose to create the multitenant Business Intelligence (BI) platform which includes collecting business requirements and analyzing the same while representing the industry standard KPIs. Furthermore, the process involves designing an Oracle server data warehouse from a typical database, building an ETL system to extract, transform and load and also to clean the unwanted duplicate data created before the proposed system, and while building highly interactive dashboards that clearly define and monitor our education system.

Keywords: Predictive Analytics, Business Intelligence, Data Warehousing, QlikView.

INTRODUCTION

With the increased advancements and number of colleges becoming autonomous, making decisions have been very difficult for the college Authorities. It is true that most of the colleges have moved paperless leaving the file system behind but analyzing the data saved is not an easy task. Managing and analyzing this data effectively is the only way the college can hold its place in the competitive education sector. This document aims at driving a solution to analyzing the data with the help of predictive analysis and Business Intelligence which will in turn help the college authorities for better decision making.

Business Intelligence is a concept that is used for better decision making. It comprises of use of various data

Warehouses (or databases), data analytics tools like QlikView or Tableau etc. Business Intelligence aims to bridge the gap between the traditional approach used by the colleges to gather data in excel sheets, compare and analyze it to just deriving dashboards that display the organization's goals and objectives with the one's achieved.

REVIEW OF LITERATURE

In recent times with the digitalization of various universities and colleges for various systems like admission, student feedback for faculty, score cards but the reports that are generated out of the system still need manual intervention for analyzing the data with the approved targets and the goals achieved. The reports generated do not add value to organization wide decision making.

Technology in the contemporary world is changing and so are the methods of using Business Intelligence. It has been very difficult to manage over typical and traditional methods using basic excel and creating pivot tables and manual system generated reports to study and analyze the data. Using this traditional method, we can at a time only deal with either historical or current data. Comparison of historic and current data to calculate the placements targets achieved and pass cut off was very difficult to achieve. With the help of BI and reporting tool we can not only get historical data with ETL but also, we can represent the same using diversified user interface objects which help to monitor the growth effectively and also take appropriate decisions based on it.

RELATED WORK

Many I.T giants have proposed implementing predictive analytics in the education sector. Data analytics have been applied for understanding the students and their needs in the college campus. Analytics based on 'students interested in extracurricular activities' (with various sub interests), 'students only interested in curriculum', 'students interested in research activities', 'student's scorecards' and also identifying the high-risk students with an alerting system' etc.

Traditional methods are not ideal for data searching, analyzing and reporting as it leads to challenges like high analyses cost and time and there is no clear action path which can be followed to achieve the results.

System users are constantly being challenged to efficiently access, filter, and analyze data and gain insight from it without using data analytics solutions that require specialized skills. They need better, easier ways to navigate through the massive amounts of data to find what's relevant to them, and to get answers to their specific business questions so they can make better business decisions more quickly. Hence after analyzing through Business Objects XI, Tableau etc. we consider using QlikView for the proposed system.

ANALYSIS

Educational organization like colleges being an organization have a structure where there are some operations and communications to be carried out and it is very difficult to manage as each action of the user may affect the entire college. Tracking each and every task or sub-task is difficult and making clever decisions out of it which will best benefit each user is not an easy task to perform. It takes systematic information to build an organized today and tomorrow and to get help with accreditation and Business analytics gets the job done right.

The proposed system ensures that the data from different sources can be loaded into one and then can be transformed into tactical business logic over the transformation layer. The data is from various sources is brought to the staging area where various aggregations are levied on the fields and stored in the central warehouse. The central warehouse is used for storing all the data. The data from the central warehouse is used for transformations and the same is stored in the form of cubes or DataMart's. The data from Datamart is fetched to the BI reporting tools where the main ETL logic is displayed to the user.

BUSINESS INTELLIGENCE

Business intelligence is just not a concept but also a broad category of applications and technologies that are used to gather, analyze, store and report data helping in better decision making.

ETL

ETL is a process of Extraction, Transformation and Loading wherein the data is extracted from different sources and transformed into one format and the then loaded into the data warehouse and BI tools.

- Extraction: In the Extraction step the collection of the desired raw data is done from the Operational Systems.
- Transformation: In the transformation step the collected data is transformed and is ready to be used in the analytics model. This data can then be molded as per the desired requirements using desired attributes to fit the Business requirements.
- Loading: In the loading step the data is loaded into the target reporting tools where dashboards and reports can be generated out of the data and analyses can be done.

PREDICTIVE ANALYTICS

Predictive analytics is a form of advanced analytics which uses historical to present data to display or forecast trends. It implies applying of statistical analytical algorithm to student the historical and present trends and can report the likelihood of the event to occur.

PROPOSED SYSTEM

The user of the system will be provided with various dashboards for 'Placement', 'Student Enrollment ', 'Student Feedback / Learning ', 'Student scorecard analysis '. With the help of these dashboards the user can effectively make decisions based on the analytics drawn.

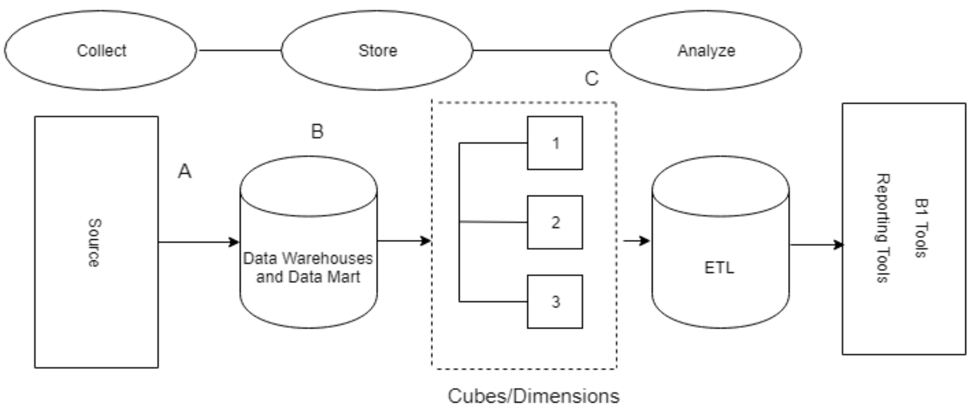

Fig-1: ETL architecture of the proposed system [high level]

The above figure (Fig1) illustrates the high level ETL architecture of the proposed system which includes data from sources system is collected and fed into the Data warehouse and Data Mart where the data is stored in the form of cubes and dimensions. ETL process is applied on the data fetched from Data Warehouses and Data Marts and the resulting analyzed data is then presented using Business Intelligence tools in the form of the Dashboards.

PLACEMENT

In this dashboard the user will be able to view

- The analysis of the total number of companies that visited the campus in the current year in comparison with last year and the performance ratio of the same.
- An analysis of total number of students in college with total number of students eligible for campus placements according to the scorecard.
- An analysis of the number of students that are placed through campus recruitment in current year in comparison with last year and the ratio of the same.
- An analysis of the trend line chart displaying the actual number of students in college, actual number of eligible students, actual number of placed students and the targets that was set by the organization.
- An analysis of the students who are eligible for the placement and attended the placement but are not selected.

This will help the user to make organization wide decisions based on the placement analysis.

STUDENT ENROLLMENT

In this dashboard the user will be able to view

- The analysis of the students who have enrolled for admission in current year in comparison to last year.
- The analysis of the students who have enrolled for the admission online in comparison with offline.
- An analysis of the students who have enrolled for various professional coursed from organization and from outside the organization with the targets to fill the course seats.
- An analysis of the course seats filled this year in comparison with the last year and via which medium.

This will help the user to make decisions regarding the promotion and advertisement of the organization in case there is a drop in the admissions or retain the students depending on the enrollment performance of the organization.

STUDENT FEEDBACK / LEARNING

In this dashboard the user will be able to view

- An analysis of the feedback given to each department or faculty, the granularity of the data can vary as per the selection mad by the user.
- An analysis of the total number of students in each department and the students participated in the feedback process.
- An analysis of the expected Performance of the faculties with the targets and the actual results calculated out of the feedback process.

STUDENT SCORECARD

This is the most crucial dashboard for the organization. It will depict the process of understanding the students' performance. A predictive analysis that would provide an information as to which student is at a high-risk for becoming a dropout and in what areas the student is struggling, or it can also provide information about the Excellency of a student.

CONCLUSION

In the current system there is extensive use data in excel and xml format which further require processing. Data can be easily read from this format but analyzing and making decisions using this data as driving set is a very complicated task to perform. This is where the Business Intelligence and predictive analysis can be used.

Business Intelligence and Data Analytics transform raw data into information or crisp facts and figures. This will not only benefit the organization as a whole with the prospective of decision making but also give them an overall view of the achievements versus their targets. This will help in improving the teaching and learning or processes and also play as a driving factor for various initiatives to be taken in the field of education.

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As Alan Kay says, “The best way to predict the future is to invent it.” To meet the needs and demands of productivity in the field of education, it is a good choice by bringing in technologies like Business Intelligence and Data Analytics.

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CSI BASED KEY GENERATION TECHNIQUE USING E-KET

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ABSTRACT

With enhancement in wireless technology, security has become an important part in designing of network. Network security is an important aspect of system administration. We are living in a world where there is access to information anywhere, anytime, be it voice, multimedia or data analytics. This information should be provided to the user with the highest possible security. Thus the information exchanged for communication should be highly secured, authentic and only accessible to the authorised user.

Recent research has shown that, this security can be provided through RSS (Received Signal Strength) based key generation techniques for authentication of user. But RSS based key generation technique has a drawback that the key generation rate is very low. Also RSS based technique is highly applicable for mobile devices. In M2M Communication the devices can be static or mobile based. So we explore a technique which is based on Key generation through CSI (Channel State Information) of a channel. Key generation using CSI information can be efficient in the terms of providing security as they can generate quiet a long key as compared to RSS based technique.

We deploy an algorithm as a solution to key generation without using additional hardware for key generation and verify that the malicious user is not able to decode the key sighting to the randomness obtained to our algorithm. The major portion of the algorithm concentrates on making the key random so that the attacker is not able to decode the key within a time span which is vulnerable to the communication. When an attacker tries to use the same algorithm and try to sabotage the communication, due to the property of CSI information of OFDM channel, the generated key will be different. Thus it will not match with the secret key used for actual communication. Hence the user will not be able to hijack the communication.

Keywords: CSI, OFDM, M_2M, RSS,Communication

4. INTRODUCTION

Security is an important aspect in today's world. The wars have shifted its coarse to cyber wars rather than actual wars. Wars are not fought with arms, ammunitions and artillery, but with attacks on the enemy's data. Cyber Warfare has increased in today's world. Thus there arise a need of building a secured data system to ensure the integrity to the system. Whenever there is communication between two devices, it has to be secured one. Thus we explore the security aspect for M2M communication of IoT.

Due to shared nature of channels in wireless communication, securing the information is a challenge. With inclusion of both dynamic and static devices in M2M Communication, security have become even more challenging. Research in the field of key generation techniques has portrayed that RSS based key generation is vulnerable to low secret bit generation rate due to coarse grained channel information. Also, since the M2M devices work on 6LoWPAN protocol, separate key generation module cannot be embedded in these devices [1]. M2M devices will be small, compact, low power consuming and will have to work efficiently considering the network security. Thus we explore a key generation technique based on CSI information of a channel. *Channel State Information (CSI)* contains information about parameters concerning the channel and the interference. This information is extracted from the feedback channel from the receiver.

Orthogonal Frequency Division Multiplexing (OFDM) based modulation contains the subcarrier which are highly uncorrelated. In OFDM, the bandwidth is divided into many sub channels which are very narrow and are transmitted in parallel. All the subcarriers maintain orthogonality between each of them. Each subcarrier should experience only flat fading and hence these are narrow in nature. Thus there is very less chance of ISI occurring. Each subcarrier contains the CSI information within the channel. We will use this property of uncorrelated channel to extract the key from CSI information.

In wireless form of communication, there are some physical property of the channel. Some of these parameters can be explored for key generation. CSI is one of the parameter of the channel which provides information available in the channel. The parameters that assist CSI values are propagation of the signal, effects of multipath, combination of fading and scattering and the decay in power with the distance. Thus the CSI value is different between each transmitter and receiver owing to these parameter effects. The transmitter and receiver

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can have different CSI viz CSIT will be different from CSIR. But the transmitter knows the CSI is obtained from a single receiver i.e. CSIR is known to receiver and transmitted over the channel by the transmitter. CSIT refers to CSI information available at transmitter end and CSIR refers to CSI information available at the receiver end. There are two levels of CSI defined, namely statistical channel state information, also known as long term CSI and instantaneous channel state information, also known as short term CSI. Short term CSI knows the current channel condition, which portrays the filter response. Thus when the filter response is known, received signal can be optimized to achieve low bit error rates. Long term CSI knows the statistical characteristics of the channel [2].

The limitations of CSI information are dependent on the changes in channel conditions. In the systems where channel conditions changes very fast, only long term CSI should be used. Similarly, in the systems where channel conditions vary at a lower rate, short term CSI should be used. Our system should use the combination of both of these CSI information [2].

To understand how attacks are done during key generation, let us assume two parties Alice and Bob are trying to exchange the information using the RSS based Key generation technique. While Alice and Bob estimate the received signal strength, an attacker Eve injects some information which is utilised by Alice and Bob to generate the secret keys. Since RSS based technique suffer from low key generation rate, it is easier for Eve to inject its information. Injection of this information takes place at specific opportunities such that the key generation protocol does not identify the deceit and the attack goes successful. Now, if we use CSI based key generation technique, it can generate key at a higher rate making probability of successful attack negligible. Due to multipath fading characteristics of OFDM channels, CSI decorelates at a distance of half the wavelength λ. Thus for a frequency of 2.4 GHz, the decorrelation can happen only at a distance of 6.25 cm. Hence the attacker who will be λ/2 distance apart will not be able to decorelate the channel, keeping the security intact. Also, on an average, RSS based key generation techniques generates key at 2bps speed. If we use AES based encryption technique, which requires 128 bits, it will take more than one minute just for generation of key delaying the important communication. Hence we take CSI based key generation approach.

To understand in depth about how key will be generated using CSI information, let us take an example of Alice and Bob. Alice and Bob will send a random signal to each other through the subcarrier of OFDM channel. Each subcarrier contains CSI information in it. Since Alice and Bob are at the same distance while sending the information, CSI information will be same. We assume that the condition remains same while exchanging the random signal. Using this same CSI, we will generate a key which will be private only to Alice and Bob. And if the attacker Eve, tries to intercept the signal, it is not possible as Eve will be λ/2 distance apart so cannot decorelate the information.

Since our dissertation aims at generation of secret key for M2M devices, we consider that the devices will be precise in size and cannot accommodate a special physical hardware for key generation purpose. We need to generate a secret key which is unknown to the attacker through the information which is already present with both the communicating parties. Thus we explore the physical channel of OFDM and use the CSI information available within the channel to generate a secret key which can be used for further authentication of the user.

5. MOTIVATION

M2M communication is often used for remote monitoring. In product restocking, for example, a vending machine can message the distributor when a particular item is running low. Machine will talk to another machine without human intervention. Since there in no human intervention and monitoring, security becomes a very critical issue. M2M communication is an important aspect of warehouse management, remote control, robotics, traffic control, logistic services, supply chain management, fleet management and telemedicine. It forms the basis for a concept known as the Internet of Things (IoT)

Security being major concern for this technology, we find out that the best of research have some shortcomings and drawbacks. Thus it provides motivation for us to explore the security aspect and come up with a better solution.

The main *features* of the E-KET are as follows

1. Minimization of bit injection opportunities hence eliminating sabotaging attack.
2. Significant reduction in Key recovery opportunity resulting into better security aspects
3. Efficient in terms of time and hence can be used for M2M communications where fast key generation is utmost important.

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4. Provides solution to the problems associated with previous research based on RSS and CSI based key generation.
5. Predictability of the key bits very low as the concept of interleave matrix is applied.

3- E-KET

The key should be generated fast compared to RSSI based key generation, as the communication can be faster in M2M devices. The malicious user should not have key recovery and sabotaging opportunity as done in previous research. Key generation should be efficient and the key should be able to be generated without external hardware. Thus we propose E – KET.

3.1 Analysis

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Key generation protocol has three stages.

1. Quantization phase

In this phase the estimation of channel is done and CSI information will be transmitted and received by both Alice and bob. The received information will be processed to form the bits from the channel information.

2. Information Reconciliation

Here, if there are any errors due to noise in the channel will be rectified using some error codes. The errors will be identified based on the information reconciliation methods and can be corrected.

3. Key verification phase

In this phase the key generated in verified by simple exchange of information. And if the key is same, the information will be exchanged. Thus formally key verification takes place.

The research say that the injection opportunities can be found out during the quantization phase. Both sabotaging and key recovery opportunities can be found out during the quantization phase. Hence the research based on CSI based key generation techniques needs to be changed and the seriousness of key injection opportunities needs to be considered.

3.2 E - KET- The Algorithm

The following algorithm can be used for generating a key from CSI information of OFDM system.

1. Alice and Bob exchange their CSI information which can be obtained from uplink channel of OFDM signal. This information is a random signal and is analogue in nature. Sa is the information available with Alice and Sb is the information available with Bob.
2. Sample Sa and Sb with a common sampling rate for both Alice and Bob. We get the values in the form of array after sampling Sa and Sb. Thus Sa and Sb are now the array of values.
3. Calculate the threshold values q+ and q- at both Alice and Bob independently.

   $q+ = \mu(\text{samples of } Sx) + \alpha^* \sigma(\text{ samples of } Sx)$ [From eq1]

   $q- = \mu(\text{samples of } Sx) - \alpha^* \sigma(\text{ samples of } Sx)$ [From eq2]

   Where μ is the mean of all the samples, σ is the standard deviation of all the samples and α is a constant to differentiate the values of q+ and q-. Generally, α is set to 0.3 - 0.45.
4. Discard all the values in between q+ and q-. The values above q+ will be assigned value 1 while the values below q- will be assigned value 0. Thus we get a stream of values at both Alice and Bob. This stream of values is termed as Ba and Bb.
5. Check if the number of bits in Ba and Bb respectively is minimum 10 bits. If yes proceed to 6. Else go to 1.
6. Calculate the number of bits in Ba and Bb respectively. Define a counter. Initialise the counter with the value equal to the first bit of the number calculated.
7. Define an interleave matrix of size m X n.
8. Check the number of bits in Ba and Bb respectively. If number of bits in Ba and Bb respectively is less than m*n go to 9. Else go to 10.
9. Zero pad Ba and Bb respectively such that the number of bits in Ba and Bb is equal to m*n. go to 11.

10. Discard the values that exceeds m*n. Go to 11.
11. Insert the values of Ba and Bb row wise in the defined interleave matrix. And retrieve column wise. And update this values respectively in Ba and Bb. Decrement the counter.
12. Check if the counter is 0. If it is 0 stop the algorithm else go to 11.

EQUATIONS, FIGURES AND TABLES

Alice and Bob measures the amplitudes of CSI information. Suppose the amplitude of signal generated at both parties are Sa (t1, t2,...tn) and Sb (t1, t2,….tn). Both Alice and Bob will divide the signal into small blocks. Both the parties will then find the value of q+ and q-.

$$q+ = \mu * S(t1, t2, \ldots . tn) + \alpha * \sigma * S(t1, t2, \ldots . tn) \qquad \ldots \ldots \ldots \ldots ..(eq1)$$

$$q- = \mu * S(t1, t2, \ldots . tn) - \alpha * \sigma * S(t1, t2, \ldots . tn) \qquad \ldots \ldots \ldots \ldots ..(eq2)$$

Where μ = mean value of the signal, σ = standard deviation and α is the tuning constant. It is assumed that $\alpha \geq 0$. The above protocol finds out that if $\alpha \geq 0.3$, then the bit errors are found to be 0. So they use α= 0.45 for mobile environment and α= 0.7 for static environment.

Both the parties (Alice and Bob) discards the values which lies in between q+ and q-. Both parties also maintain the list of discarded values by exchanging the discarded values and agreeing on certain values to be kept. Both the parties generate a sequence based on the vales which lies above q+ and below q-.

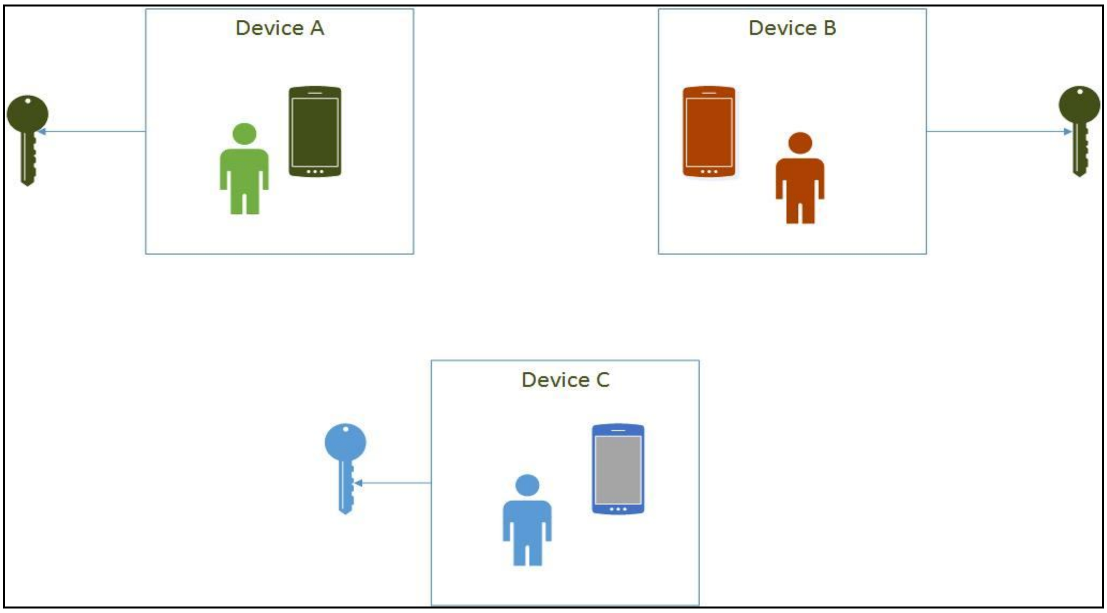

Fig-E: KET Implementation

Our implementation contains three devices as shown in Figure shows Device A and B are the authentic devices who want to communicate with each other. These devices are Alice and Bob as we name them for our convention. Device C, stated as Eve, tries to listen to device A and B and try to find out the key so that he can break the algorithm in order to listen the communication between them. The communication channel formed between the three are different from one another.

The device C which is not the authentic device in the communication tries to listen to both devices A and B. Thus there are various options for device C to destroy the communication. He can find out the key by listening or he can use sabotaging opportunities to add his own information in the channel between devices A and B or he can try to destroy the key generated by device A and B.

E-KET is deployed in each device, but it is specific to its CSI value. Thus when Device C tries to gather the information from Device A and B, it will be difficult for Device C to find out the key between the two. The algorithm may be same in all the device, but the key that will be generated based on CSI value will be authentic only between Device A and B. Thus it will be difficult for Device C to know the key and break the communication. The randomness is maintained by E-KET which ensures that the key is not easily decodable.

We compare the timings (Sec) for each of Alice, bob and Eve with respect to various key sizes (bits). The following table shows the value of timing in seconds for various key sizes.

Key Size	Alice	Bob	Eve
12 bits	0.012812	0.00249	0.01239
24 bits	0.020642	0.018156	0.019852
48 bits	0.024675	0.025416	0.025086
96 bits	0.05346	0.063869	0.057013
192 bits	0.149282	0.156551	0.143202

Table-2: Key Size vs Time

CONCLUSION

Security is a major concern for M2M communication as this is the latest form technology. Standardizing the security protocol remains the key consideration. Our work towards this standardization is a motivation from the drawback obtained from the previous research. We found out in the previous research that RSS based key generation technique was very slow. And designing a security scheme for M2M communication which will connect billions of devices had to be fast. So we went through various aspect of the research and found out that there is a CSI based key generation technique which is fast compared to RSS based key generation technique. Using CSI based technique was found to be beneficial as it does not require additional external physical hardware for key generation and also it proved to be very fast.

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E-GOVERNANCE INITIATIVE AND DIGITAL DIVIDE: A CASE STUDY ON GYANDOOT PROJECT

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ABSTRACT
Information and communications technology (ICT) refers to all the technology used to handle telecommunications, broadcast media, audio visual processing and transmission systems, and network-based control and monitoring functions. A digital divide is an economic and social inequality to the access to, use of, or impact of information and communication technologies (ICT). This paper tries to find out whether the Gyandoot project – an E-Governance initiative is successful in making effective use of ICT or fails in its effectiveness because of Digital Divide.

Keywords: ICT, telecommunication, broadcast media, transmission systems, digital divide.

INTRODUCTION

Various E-Governance Initiative

Bhoomi Project: Bhoomi Project started by The Department of Revenue in Karnataka State for rural people of Karnataka state. It has computerized 20 million records of land ownership to keep records of 6.7 million farmers in the State. This project has won Silver CAPAM award 2002.

e-Seva (electronic Seva) Project: E-Seva Launched on the 25th of August 2001. There are 36 eSeva centres spread across the twin cities of Hyderabad and Secunderabad and Ranga Reddy district in Andhra Pradesh. eSeva centres offer 118 different services like registration of births/deaths, registration of applications for passports, issue of births/deaths certificates, filing of Sales Tax returns, Trade licenses of MCH, B2C services like payments of Tata Teleservices, Reliance, sale of Airtel Magic cards, payment of utility bills/taxes etc.

The Computer-aided Administration of Registration Department (CARD) Project: CARD project implemented in Andhra Pradesh. It introduced electronic delivery of all registration services to eliminate the troubles affecting the conventional registration system.

FRIENDS Project: It implemented in Kerala. FRIENDS stands for Fast, Reliable, Instant, Efficient Network for the Disbursement of Services is part of the IT Mission. It handles 1,000 types of payment bills including utility payments for electricity and water, revenue taxes, license fees, motor vehicle taxes, university fees, etc.

Gyandoot Project: It is an intranet in Dhar district connecting rural cybercafes catering to the everyday needs of the common people implemented for giving global access for rural people of Madhya Pradesh and has owned Stockholm Challenge Award 2002; CSI National IT Award.

CERT-IN (Indian Computer Emergency Response Team) Project: It has been established by the Department of Information Technology to be a part of the international CERT community. It alerts the community on latest security threats in the form of advisories, vulnerability notes and incident notes.

VidyaVahini Project: It is mainly designed to provide the opportunity for schools, teachers and students for everyone across the nation, to express and share their creative and academic potential via the internet.

Controller of Certifying Authorities (CCA): It certifies the technologies, infrastructure and practices of all the Certifying Authorities licensed to issue Digital Signature Certificates.

LOK MITRA Project: It is the first electronic service in which computer server is linked to different Departmental servers through Dedicated Leased Line & Dial-up Network having multiple e-counters to handle all services. It has facility of making payments using Credit Card.

STAMPS & REGISTRATION SOFTWARE Project: It is implemented in the Maharashtra for enabling enhanced revenue earnings for the Stamps and Registration operation.

SETU Project: It approaches to Harness the benefits of IT for effective and transparent functioning of the administration of the Government of Maharashtra to possibly makes the routine interactions faster, smoother and transparent.

JAN MITRA Project: It provides an Integrated e-platform for rural population of Rajasthan to get desired information and avail services related to various government departments at kiosks near their doorsteps.

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Project: DRISHTEE: It provides information about and access to education and health services, market-related information, and private information exchanges and transactions, for rural and semi-urban people of Haryana, Punjab, Madhya Pradesh, Gujarat and Orissa. It has won the Social Enterprising Award in 2002.

WebCITI Project: It is intended for building citizen-IT interface for services offered by district administration at Fatehgarh Sahib in Punjab and also for providing complete workflow automation in District Commissioner's office.

AARAKSHI Project: It is an Intranet based project that has been developed and implemented for Jaipur City Police to enable the city police officers to carry out on-line sharing of crime & criminal data bases, carry out communication and perform monitoring activities.

FAST Project: The 'Fully Automated Services of Transport' is another e-governance project for various cities of Andhra Pradesh with the objective of making the transport department citizen friendly in its functioning and providing SMART services to the public.

VOICE (Vijayawada Online Information Centre) Project: It was launched in June 1998 and implemented in December 1999 to deliver municipal services such as building approvals, and birth and death certificates, to the people of Vijayawada – Andhra Pradesh. It also handles the collection of property, water and sewerage taxes.

MUDRA (Municipal corporation towards Digital Revenue Administration) Project: It was implemented for the Holding owners, Tax collectors, officials at headquarter levels and Circle levels to get total picture of tax collection that will help the decision makers to take suitable decision for further improvement at Bihar.

KHAJANE Project: The online treasury project - KHAJANE computerises all the 216 treasury offices in Karnataka and is connected to a central server at the State Secretariat through Very Small Aperture Terminal. It also provides regular updates regarding the State expenditure and receipts to the central server.

eCops (e-Computerised Operations for Police Services) Project: It was Launched in 2002 at Andhra Pradesh, as part of the VISION 2020 with objective of modernization of police administration.

OLTP (On Line Transaction Processing) Project: It was Launched in 2002 to connects 16 government departments in Andhra Pradesh on a single network. All government records and transaction procedure details at the district are centrally stored and managed on a single Oracle9i database.

TARAhaat Project: It means all-purpose haat (a village bazaar), having a commercially viable model for bringing relevant information, products and services via the Internet to the unserved rural market of India implemented at Himachal Pradesh.

Mahiti Shakti Project: It was launched in 2001, having portal http://www.mahitishakti.net/ operates like a single window by which the citizens can access information related to all aspects of the government's functioning, various benefit schemes and services ranging from obtaining ration cards to getting sanction for old age pension. It is implemented in Gujarat.

Warana Wired Villages Project: The objective of the project has been to utilise IT to increase the efficiency and productivity of the existing sugar cane cooperative enterprises by setting up of a state-of-the-art computer communications network to provide agricultural, medical, and educational information in the local language to villages around Warana Nagar in the Kolhapur and Sangli districts of Maharashtra.

Community Information Centre Project: In 2002, the Prime Minister dedicated to the people of the eight North-Eastern states a new structure of localised governance called Community Information Centres to provide Internet access and e-mail, printing, data entry and word processing and training for the local populace. The states where it implemented are Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

Community Learning Centre Project: It was implemented in 2001 as a joint initiative between the Azim Premji Foundation (APF) and the State government of Karnataka with the objective to enhance classroom learning during school hours.

Dairy Information Services Kiosk Project: It is developed by IIM Ahmedabad's e-governance centre with two special features - to enable speedier collection of milk and faster disbursement of payments to dairy farmers. It is Implemented in Gujarat.

GramSampark Project: It is implemented in Madhya Pradesh. A complete database of available resources, basic amenities, beneficiaries of government programmes and public grievances in all the 51,000 villages of Madhya Pradesh can be obtained by accessing the website.

Akshaya Project: Akshaya e-Centres are being set up throughout Kerala to provide e-literacy to one member from every household and act as ICT dissemination nodes and ITeS delivery points in every village.

Headstart Project: It provides computer-enabled education and basic computer skills to all students in 6000 Jan Shiksha Kendras of Madhya Pradesh.

Saukaryam Project: It launched in the year 2002, Saukaryam, implemented Andhra Pradesh as a model e-governance initiative for local governments for giving facilities like Online payment of Municipal dues, Online Tracking of Building plan Status, Online Filing and Settlement of Complaints & Grievances, Online Registration of Births and Deaths, 20 Instant Issuance of Birth and Death Certificates, Online Tracking of Garbage Lifting to masses.

E-Chaupal Project: It started by ITC's international Business Division with the objective to deal directly with the farmer to buy products for exports is getting transformed into a meta market for rural India. It is implemented for villagers of Madhya Pradesh. (report, 2002)

Digital Divide: The term digital divide refers to the gap between those with regular and effective access to digital and information technology, and those without this access in terms of both - physical access to technology hardware and skills and resources which allow for its use. (Bansode, 2011)

OBJECTIVES OF STUDY

This study aims

1. To study on Gyandoot project – An E-Governance Initiative
2. How far ICT could achieve the target set for this project
3. Whether any digital divide affected to this project

RESEARCH METHODOLOGY

The researcher has adopted descriptive methodology. For this report, reliance has been placed on books, journals, newspapers and online database. This paper is based on secondary data for which references are collected from various sources.

A CASE STUDY ON GYANDOOT PROJECT

Gyandoot Project is the first project in India for a rural information network in Madhya Pradesh at the Dhar district. Every village has either a computer centre or "soochnalayas" at prominent market places or major roads. Twenty–one village Panchayats in the District are connected with information centres. (Bansode, 2011)

20 kiosks ("soochanalayas") were initially set up in various rural centres, with each kiosk typically serving a population of 20,000-30,000 villagers. A further 18 kiosks were added later, totalling to 38 kiosks. Each kiosk was run by a trained operator and can provide a range of services for a nominal service charge, ranging from around Rs 4.8/- for 'ask the expert' through Rs. 9.6/- for registrations to Rs. 24/- for use of the matrimonial site (many villagers subsist on less than Rs. 96/- per day). eTransparency-related information and services provided include:

- Land records: farmers can submit an official map and land record of their land ownership to apply for loans using via the kiosk, and then come later to collect the official documents.
- Below poverty line and other lists: government provides special welfare schemes for those families in a village deemed to be living below the poverty line. This list - previously available only to governing bodies in the village - is now available online, so that families can check directly to see whether or not they are listed. Lists are also available relating to public distribution of food, and pension and rural development scheme beneficiaries. There are also details of the grants given by government for use by village committees.
- Grievance registration: if a citizen has a grievance to raise against a public servant, they previously had to travel to district headquarters. Now registration and progress reporting could all be done remotely, through the kiosk.
- Market prices: related to e-transparency in markets rather than government, this is the facility by which prices for agricultural goods from the district wholesale markets are made available to farmers via the kiosk. Having such prices would enable them to wait at home until the right price is reached, rather than having to rely on intermediaries (or make a special journey to market, which might be up to 25 kilometres distant, needing 4-5 hours' travel time with a typical journey cost of around Rs. 24/- plus loss of income).

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Other services set up include: rural email facility; a village auction site; a matrimonial site; an "ask the wiseman" service for children; an "ask the expert" service for farmers; a village newspaper; an e-education site; and employment news (aimed at semi-skilled workers). The kiosks can also be used free of charge by local government officials, e.g. for email or to exchange health/education data with district headquarters. (Gupta, 2003)

ROLE OF ICT

The central hardware of Gyandoot project is at Dhar District government headquarters consisted of a server with a 450 MHz Pentium III processor, 128 MB RAM, 40 GB disk drive, 2 MB graphics card, 15" monitor, and 48x CD-ROM. Kiosk client PCs had a 433 MHz Celeron processor, 32 MB RAM, 4.3 GB disk drive plus floppy, 4 MB graphics card, 14" monitor, and 48x CD-ROM, though specifications for later kiosks were upgraded slightly. Telecommunications was effected using 56kbps modems - one each on the client side, five on the server side - connected as an intranet using a mix of dial-up lines and wireless in local loop connections. Each kiosk had a dot-matrix printer and a five-hour back-up UPS. The server system runs on Windows NT with IIS server; client PCs run Windows 98. MS SQL Server, Visual Basic, Java Development Kit and MS Access were used to develop the applications, plus an Indian language font set. The main front-end used by the system is Internet Explorer.

Whenever information is required, the kiosk operator ("soochak") should dial through from the kiosk to the server at district headquarters. All the software applications are menu-driven and Web browser-based. The operator uses them on behalf of the users who visit the kiosk.

WHY DIGITAL DIVIDE

The tele-communication infrastructure in the district is poor. They use mostly dial-up connections which is slow and unreliable. For faster connection, CorDECT was installed, but it is installed only in 7 out of the 38 kiosks. When there were any technical issues, only the CorDECT company could fix them. Also, one of the biggest problems that Gyandoot had was the simple fact that hardly anyone was using it as local people were unaware about the project. Out of the 38 telekiosks across Dhar, 10 were not operational and the rest only served a handful of people each day as it was operating very slow. Over a period of time, there was actually a deterioration of usage. There was a problem of distance also; in areas with very remote telekiosks, confusion about services was widespread, and 30% of people still did not know of the existence of Gyandoot. The very rural poor as well as women and lower caste society did not participate because they were not comfortable using such technology, they were confined to their homes, and they simply did not know about it. (Miranda, 2012)

CONCLUSION AND SUGGESTION

Gyandoot project began aiming to make government services more accessible to villagers in rural India. Before this initiative, villagers would have to travel long distances to try to reach someone that may or may not have been there. They may have also faced discomfort, harassment, and corruption from public officials. So, Gyandoot was created, computerizing the front-end of government services. But because of the digital divide the purpose is not totally fulfilled. It could have been achieved at least by campaigning to raise awareness, providing appropriate training to the stakeholders, using updated hardware technology and invigilating continuously for any requirement arises while implementing the new project.

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SAFE TRANSACTION FROM AUTOMATIC TELLER MACHINE USING BIOMETRIC METHODS

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ABSTRACT

ATMs are the electronic devices which are used to perform Financial transactions. These ATMs are used by the Bank Account Holders by using a Card and PIN associated with the card. Due to advancement in technologies, many fraudulent activities have taken place which have hampered the security aspects of ATM machine. Thus, this paper has proposed a method to enhance the security by replacing the PINs by the biometric identification systems especially fingerprint.

Keyword: Automatic Teller Machine, Biometric, Authentication, Unique Identity Authority of India (UIDAI), Fingerprint

1. INTRODUCTION

Automatic Teller Machines which is abbreviated as ATM are combination of Electronic as well as Telecommunication devices which are used to perform Financial transactions. The transactions are done by the individuals having a valid ATM card and a Four-digit PIN number associated with it. Due to many technological advancements, many fraudulent activities have been observed such as duplication of ATM cards, Eavesdropping, Card Skimming etc. These activities have affected the security on the transaction process by using ATM cards. The ATM machines are also interlinked to the main ATM host, which enables the individual to access their account from an ATM belonging to a different Banks. The basic architecture of ATM is shown in the figure given below.

Fig -1: Biometric in ATM

In the recent years, some algorithms, methods and devices have been proposed and implemented to overcome the severe issue to a great extent. In all the literatures Biometric Recognition methods have been considered as the most important element in enhancing the security as Prakash Chandra Mondal et. al. [2] has proposed a method to ensure the security and authenticity of the legal Bank account holder by recognising the signature of the card holder with the one stored in the database which is usually taken during the process of account opening. The method proved to be effective because by using behavioural biometric, many types of fraudulent problems were resolved. Similarly, G. Renee Jebaline et. al. [1] have also proposed a similar architecture but the biometric used was Fingerprint Recognition system. Some have used the Unique Identity of India (UIDAI) which is popularly known as Adhaar is included along with Fingerprint Recognition system. Adhaar card is recognised by the 12 digit unique identity number which is issued to all the individuals.

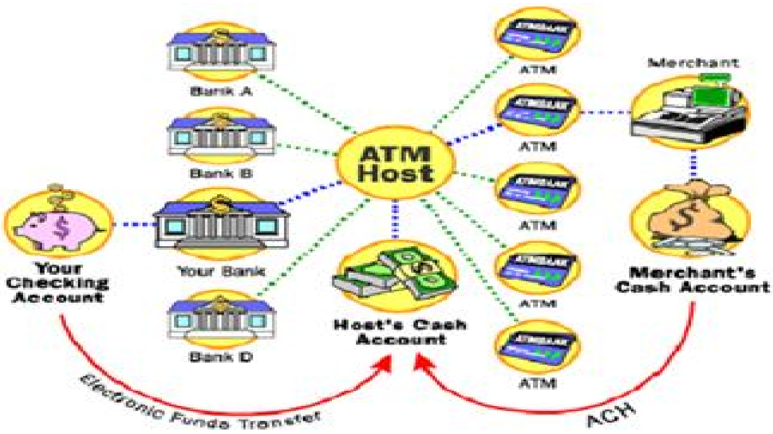

Fig-2: Architecture of an ATM Machine

2. PROPOSED SYSTEM

In the proposed system, security aspects have been taken care by Biometric method in which Fingerprint has been found to be the most reliable form of Biometrics among others [3] as stated by R.P. Jain et. al in the form of a comparison table. The table was based on seven important parameters which are: Universality, Distinctiveness, Permanence, Collectability, Performance, Acceptability, Circumvention. The fingerprint images are to be taken by the ATM machine in place of PIN number and if the scanned fingerprint is found to be valid, then the desired request of the user can be fulfilled by the ATM otherwise a warning SMS will be send to the registered mobile number. The person will be given three chances and after the third false attempt, the card will be blocked.

In the proposed method a database of Fingerprints of a valid account holder is needed to be developed. The database will be accesed by the ATM machine, so that when an individual will try to access the services of ATM, the Fingerprint taken in the real time will be verified with the sample stored in the database. The database is needed to be developed and updated during the new account opening of any individual.

3. HARDWARE REQUIREMENTS

The implementation of the paper requires some hardware in which the most important is the Fingerprint Scanner which will help to take the image of the fingerprint and will use the recorded data for recognition. The most appropriate fingerprint scanner which can be used to implement the project is shown in figure below. The features of the Fingerprint scanner are:

a) Easily interfaceable with Arduino, Raspberry-Pi

b) Works on 5V power supply.

c) Having inbuilt read and write Fingerprint templates and databases.

d) Capable of 1:1 recognition and 1:N identification.

Fig-3: Fingerprint Scanner

4. CONCLUSION and FUTURE SCOPE

The biometric system will reduce the various types of fraudulent cases which are occurring due to the application of Magnetic Card Reader. The method used is also easily implemented and can be deployed in the ATM machines with minor Hardware as well as software changes. The system can be implemented by using various types of Biometric Authentication system depending on the need and demand of the existing world.

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BLOCKCHAIN TECHNOLOGY - A SURVEY

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ABSTRACT

This research paper provides a review of Blockchain technology, Blockchain is a ledger that can keep high transaction between the two parties proficiently and in a permanent way. Blockchain is an evolving technology in today's world and a lot of uprising and research has just begun regarding this distributed technology. Several theories of Blockchain technology are mentioned. The reviewed approaches are classified according to development phase of the technology. The major goal of the paper is to provide a comprehensive reference source for the researchers involved in Blockchain technology and smart contract, regardless of particular feature or classifier.

Keywords: Blockchain, Decentralized, ledger, Bitcoin

I. INTRODUCTION

Blockchain is a spread ledger that can save transaction between the two dealers proficiently and in a confirmable and permanent way. Block is nothing but a container for data. Each Block contains three things: Data, Hash and hash of previous block. Data can be anything for e.g. - Data of Bitcoin contain transaction data such as From, To and Amount. In file storage block it contains Filename, Size and Date.

A block includes a Hash which is like unique finger print, it uniquely identifies the block and the way we get this hash, is we take everything that is stored inside a Blockchain, we run it through as hash function and we end up getting a unique code. The interesting part here is if here is a change made even though if it's a character inside the block, the hash number of the block gets completely changed. Every block, also contain a hash number of the block which is just stored before this current block i.e. previous block which forms a chain , each block points to the block which was stored before it same as the Linked List Concept. To prevent this block from hackers there are two security mechanism in a Blockchain i.e. Consensus algorithm and P2P network.

II. HISTORY OF BLOCKCHAIN

The first concept Blockchain was presented by a person called, Satoshi Nakamoto in the year 2008.Nakamoto improved the design in a significant method using a Hashcash type technique to add blocks in the chain layout without demanding them to be contracted by a trusted party. The plan was implemented in the current year by Nakamoto as a basic module of the cryptocurrency bitcoin, where it aids as the unrestricted ledger for all dealings on the network.

Satoshi Nakamoto's used both the concept of Block and Chain separately in his paper, but were finally popularized into one word called as Blockchain, by 2016.

III. TYPES OF BLOCKCHAIN

Currently, there are two types of Blockchain networks - public blockchains and private blockchains.

a) Public blockchains-A public blockchain has absolutely no access restrictions. Anyone with an internet connection can send transactions to it as well as become a validator. Usually, such networks offer economic incentives for those who secure them and utilize some type of a Proof of Stake or Proof of Work algorithm. Some of the largest and most known public blockchains are Bitcoin and Ethereum.

b) Private blockchains- A private blockchain is permissioned. One cannot join it unless invited by the network administrators. Participant and validator access is restricted. This type of blockchains can be considered a middle-ground for companies that are interested in the blockchain technology in general but are not comfortable with a level of control offered by public networks.

IV. THE SURVEY OF WORK DONE IN THE RESEARCH AREA

Greeshma R Nair and Shoney Sebastian (2017), have explained that Blockchain, be used to achieve information from multiple location retaining its validity and honesty. Blockchain helps by eliminating the participation of third parties in any contract.

Shiv Raj Sharma (2017), talked about the Blockchain invention alongside some of its vast highlights and rewards. The invention is as yet proceeding with a great compact to change the world. Retail business will begin receiving the recompenses of Blockchain through improved straightforwardness of objects, more creative store network administration, better authenticity management framework, improved client outlining, and encounter against imitating and so on prompting expanded consumer loyalty and higher net revenue for retailers

Muhamed Turkanovi et. al. (2018), have proposed that EduCTX, as a worldwide Blockchain-based advanced education recognition policy. The planned policy takes the benefit of the Blockchain in command to create a worldwide reliable advanced education acknowledgment and classifying scheme. As a proof of idea, we presented an example application of the EduCTX policy which is grounded on the open-source Ark Blockchain policy.

Vipul H. Navadkar et. al. (2018), have analysed that Blockchain technology could change awareness about believing registers. No need to depend on reliable third parties, like government registry. New skills have always involved multinational companies, innovativeness and governments. This is mostly due to their capacity to improve the present way of functioning and facility delivery. Its emerging in still many applications and its does have its own occasions and dangers.

Hoang Tam Vo et. al. (2018), have explained about research subjects that describe the public issues of on-going information management and analytics difficulties met in the progress of real-world Blockchain applications. The data in Blockchain have to be managed in terms of Multi-storage and index support, Information protection and managing smart contracts

Lakshay Swani (2018), have proposed that a lot of research work is being done on the combination of Blockchain technology into productions of varied kinds, yet employing a full-fledged scheme based on top of this technology in diverse fields need huge quantity of research to be done more. Most use cases deliberated and settled so far are free permissioned Blockchain.

Bojana Koteska et. al. (2018), have studied the existing quality issues in the Blockchain application and to identify the Blockchain qualities. Blockchain applications have to ensure safety, confidentiality, quantity, scope and bandwidth, presentation, usability, data integrity and scalability. The main aim of this study was to examine the quality requirements and solutions for Blockchain implementation.

Ibrar Ahmed et. al. (2018), have proposed that the fundamentals of Blockchain technology can be used as an allusion for people new in this arena. It has also provided an inclusive convenient idea of the operational of Blockchain technology which can be used by students or whoever involved in getting aware with this innovative technology.

Nadir Abderlrahman Ahmed Farah (2018), have explained the Blockchain technology its advantages. It is concluded that Blockchain helps removing the involvement of third parties in any transaction. It can be implemented in the different sectors to avoid fraudulent and forgery activities.

P.S. G Aruna Sri and D. Lalitha Bhaskari (2018), have proposed that Blockchain gives healthy, dispersed peer to peer structures and capability to interrelate with peers in a trustless and auditable way. The administration should deliver reliable laws for this skill, and initiative gets prepared to grip Blockchain skills. Consensus tool is the essential skill of Blockchain.

Mrs. Vrushali Khan Dare (2018), have proposed the decentralized situation for transactions, where all the communications are logged to a public ledger, which will be noticeable to everybody. Blockchain helps by eliminating the participation of third parties in any contract. It can be applied in the economic segment to escape fake happenings. The aim of Blockchain is to deliver secrecy, safety, confidentiality, and clearness to all its operators.

Roman Beck (2018), have proposed the fundamentals of Blockchain and trust, smart contracts. They have said that how world is changing from socio-technical system to techno-social- system which handles and controls the operation automatically. Blockchain can be more secured for decentralized data on the systems which will go beyond the growth of the system. Basically to use Blockchain a person should know how to process and manage a data as well computer technology knowledge. Though Blockchain is in boom but still a lot many things are yet to be done.

M. Gayathri and M. Rashmika (2018), proposed about the introduction of Blockchain, its fundamentals, Blockchain Technology, use case Blockchain and its working process. It is a technology which could be complementary in a chance space for the upcoming world that includes together centralized and decentralized models. Like any new technology, the Blockchain is an indication that initially disturbs, and over time it could encourage the expansion of a greater ecosystem that contains both the traditional way and the new innovation.

V. BLOCKCHAIN ADVANTAGES

1) **Immutable**: It means that it is really difficult to tamper or alter a block.

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2) **Irreversible**: This feature prevents double spending.

3) **Distributed system**: It means that a copy of the ledger is present with all its members.

4) **No Centralized Authority**: It doesn't depend on a central server to dominate and hence, a peer to peer system.

5) **Resilient**: This feature shows that it is not prone to any sort of major attacks.

VI. CONCLUSION

This is a survey paper about the upcoming technology called blockchain along with its history and few of its important advantages. The technology is still improving with a lot of fields for different areas and industries and is set to change the world's manner. From the survey done as mentioned above, it could be concluded that blockchain helps removing the involvement of third parties in any transaction. It can be implemented in the different sectors to avoid fake and copy activities.

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CERVEAU CAPTURE: POLICE FRIENDLY MODULE

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ABSTRACT
In order to get the right confession of the crime from the suspect, police have to put a lot of efforts, has to implement number of tactics. Most of the time it happens that after taking all these efforts they didn't get right confession, which ultimately slow down the process of justice.

Here I would like to present an idea by which it is possible to get the right confession from the suspect without taking much efforts.

Our idea works on the principle that whenever someone ask question to us, our brain is ready with the right answer, but because of human nature or tendency we manipulate that right answer and presented the way we like to. Our approach exactly works on this fact that although because of human tendency we manipulate the things but somewhere our brain knows the right answer and in fact he produces it on the same time.

Keywords: cerveau:brain, neuron: nerve cell, synapse: a junction between two nerve cell, Neurotransmitters: chemicals that enable neurotransmission, suspect: a person thought to be guilty of a crime or offence

6. INTRODUCTION

Police uses a variety of tactics to obtain confessions from people those who are accused of committing crimes. All these techniques are very time consuming and they are also not reliable, police have to struggle a lot for finding the truth. People who commits crime always tends to misguide the police during confession. They always pretend that they are saying the truth, but they are not. In crucial condition where police must made decision based on confession at that time it is very important that the confession is true. For doing this they apply different techniques of confession. (10 Police Interrogation Techniques That You Need To Know About: How Do Police Extract Confessions?, Mar 9, 2017)

Some of them are as follow

1. **Reid technique:** This technique involves isolating the suspect from others by putting them in the separate room called interrogation room and try to convincing them that they're guilty, and then suggesting them that the crime that they have committed was justifiable and better for them to admit it.
2. **Informal Questioning:** In this technique, police starts questioning first and then after sometime stops asking anything, in this situation criminal assumes that he officer suspects you of committing a crime. This makes the suspects insecure and he starts telling everything which is not asked by the officer.
3. **Good cop / Bad cop:** This technique is mostly used by the police, here one officer is very hard on the suspect and make it sure that he will get a punishment for his crime. On the other hand, second officer pretend that he cares, and he will not get or get minimum punishment, if he admits his crime. Because of his soft nature, most of the time suspect admit what he does. (nolo, Tactics Police Use to Get a Confession, 2019)

We have seen here that whatever the techniques officers are using, all are based on one thing i.e. taking out true statement from the brain. They also believe that somewhere suspect brain is ready with the information and for bringing it out they try to take suspect into confidence.

7. METHODOLGY

We know that whenever someone ask a question to us, our brain is ready with the answer. Same thing happens in case of suspect also, while interrogating, officer ask the question to the suspect, even if he knows the answer he manipulates and misguide the officer. Our methodology works exactly over here. We know that brain always has a true answer, we have to capture the true answer before it gets manipulated by the suspect. (the nervous system in 9 minutes, Mar 14, 2017) (Scientists Create An Artificial Synapse That Can Learn Autonomously, Apr 6, 2017)

Our body consists of cells. Cells of the nervous system, called nerve cells or neurons, they are specialized to carry "messages" through an electrochemical process. The human brain has approximately 86 billion neurons. Neurons come in many different shapes and sizes. (Artificial Brain Synapses Replicated in a Chip, feb1,2018)

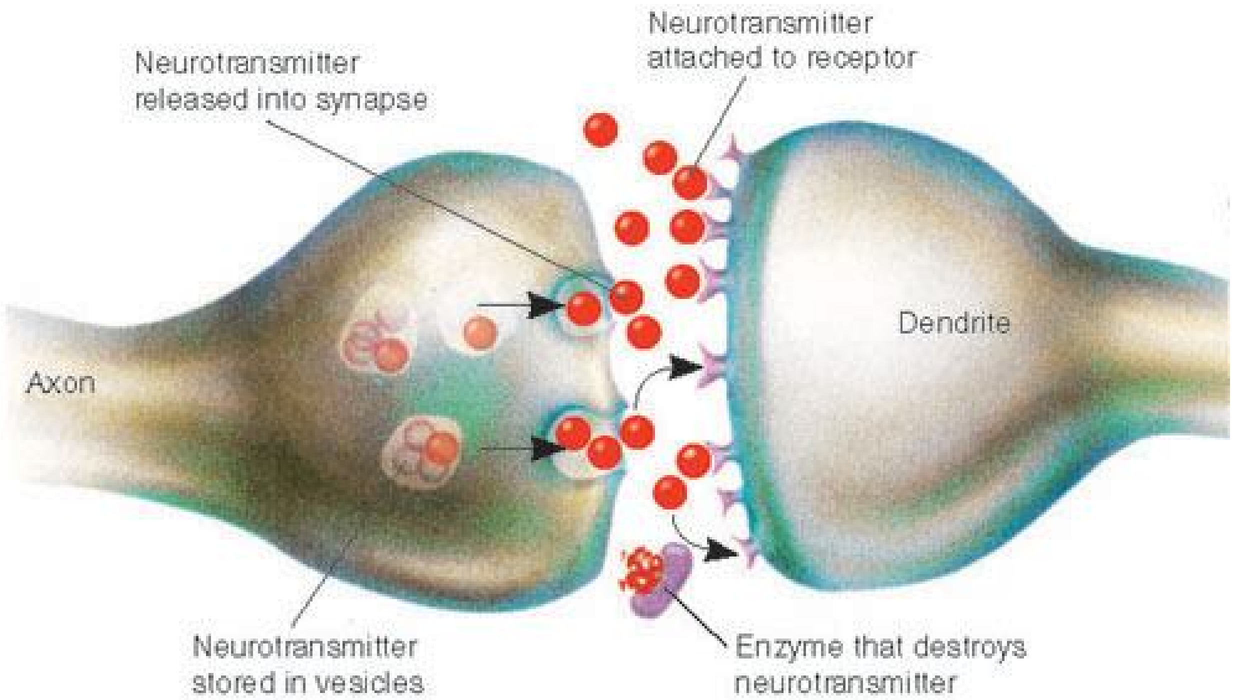

Fig: Neuron, synapses working

Our brain perform computation by sending electrochemical signals to the neurons. Transmission of these signal is controlled by synapses, the tiny gap between the neurons. The sender neuron sends the signal while the other end neuron receives the signal and transmit it to other part of the body. These are the signals which first generate, it means the very first response to the asked question i.e. the right answer. Now here our work starts. our idea is to place the chip exactly between the gap of two neurons i.e. in the synapses so that we can store the first response directly into it.

Now after implementing the chip between the neurons, it will store the information as soon as it is generated by the brain. In the receiver end our chip is working, even if suspect manipulates our chip is ready with the answer. We can connect this chip to the system to get the information in readable format.

3 CONCLUSION

By doing this it became easy to obtain true information directly from the brain via a chip. This chip can be used by the officer multiple time as a valid proof. This method ensures about getting true information without efforts. However, we cannot implement this technique on each and every suspect as it is not feasible as well as for implementing chip inside brain, we need to take permission and economically it will cost. But surely, if this technique is implemented in future then for sure it will help a lot.

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CYBER SECURITY POLICIES FOR USER'S ANOMALOUS BEHAVIOUR AT WORKPLACE

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ABSTRACT
Cyber security is an essential aspect for all business processes in both the public and private sector. Digitization has increased the huge data which is difficult to manage. Data security is also becoming a big problem because of data theft, data hacking by insider and outsider user's threats. Many times it is observed that data damaged or lost or theft only because of inside users. Therefore there is a need to study cyber security policies for employees to prevent insider user's threats at workplace. Employees those who are not satisfied with their job, not fully aware of responsibility, lack of training may behave anomalously are compromised. It will also minimize incidences which can turn into damages in future. The proposed research paper review the study of cyber security policies and the existing research which secured the business from these compromised users by detecting their anomalous behaviour at work place. This will help to predict the future probable risk of cyber-attack.

Keywords: Cyber security policies, user anomalous behaviour, Cyber-attack, insider threats, hacking.

1. INTRODUCTION
Cyber security is an important issue in the today's digital world. Cyber threats detection and prevention cost is increasing as data breaches are increasing speedily. Cyber-attacks damage the business, reputation and assets. It can be controlled timely by detecting and analysing mainly insider user anomalous behaviour. The insider threats are most dangerous because they are authorised users and have easy access to data. Therefore insider threats are difficult to identify.

2. CYBER SECURITY
Cyber Security is ensuring information integrity, confidentiality and availability. It is a triad. It represents the ability to defend against and recover from accidents like hard drive failures or power outages, and from attacks by adversaries The protection of information systems from theft or damage to the hardware, the software, and to the information on them, as well as the disruption or misdirection of the services they provide.[1]

Cyber security is the set of technologies and processes designed to protect computers, networks, programs, and data from attack unauthorized access, change, or destruction. Cyber security systems are composed of network security systems and computer (host) security systems.[2] Effective cyber security reduces the risk of cyber-attacks, and protects organisations and individuals from the unauthorised exploitation of systems, networks and technologies [3].

3. CYBER THREATS
Cyber threats can be detected and corrected vulnerabilities and anomalous behaviour and zero day attacks using machine learning. Cyber threat is the possibility of a malicious attempt to damage or disrupt a computer network or system. It is identified with the actor or adversary attempting to gain access to a system. Or a threat might be identified by the damage being done, what is being stolen or the Tactics, Techniques and Procedures (TTP) being used. [4] There are two types of threats such as insider and outsider threats. Insider threat is the biggest threat in cyber security.

3.1 Anomalous Behaviour
Anomalous behaviour means behaviour which deviating from the normal or common order, form or rule. It is an irregular, abnormal, not fitting into a common, familiar, type or pattern. Sometime users behave anomalously and that anomalous action predicts the future crime. User misbehaviour is intentionally or unknowingly need to analysis and predicts the probable cyber-attack.

3.2 Cyber-attacks
Cyber-attack is a well-planned activity. Hackers are gathering important information by targeting inside users. They are collecting information through foot printing, reconnaissance, social engineering, scanning and enumeration. These are the beginning steps of cyber-attack. Foot printing is the process of creating a blueprint or map of an organization's network and systems. Reconnaissance is gathering information necessary to perform the attack. Social engineering is the process of deceiving users of a system and convincing them to perform acts useful to the hacker, such as giving out information that can be used to defeat or bypass security

mechanisms. Scanning is the process of locating systems that are alive and responding on the network through port, network and vulnerabilities scanning. Enumeration is the process of gathering and compiling usernames, machine names, network resources, shares, and services. [5] Hackers collected information gives better insight about target important information. The main cyber-attacks are passive or active and insider or outsider. Common cyber-attacks are phishing, SQL injection, Virus and Trojans, Malware, Man in the Middle, Denial of Service, Session hijacking, etc. In this research, inside attacks will be studied to protect system from severe cyber-crime

3.3 Cyber-crime Investigation

Cyber-crime investigation is a process to investigate the cyber-crime for the collection of evidences to be presented in court. The proposed paper will also helpful to find out the root cause of cyber-attack by insiders if it is due to exploitation of insider threat for preliminary investigation.

4. CYBER SECURITY POLICY

Cyber Security policies have both a positive and negative aspect. It might say, “Company confidential information should be accessible only to properly authorized employees”. This means two things: properly authorized employees should have access to the information, and other people should not have access. When people talk about security, the emphasis is usually on the negative aspect: keeping out the bad guy [22].

When the Guidelines were developed, the drafters drew on the work of others sources, such as the Nordic Council, the United States Government, and the Council of Europe. Currently, many key players, such as the European Union and the United States, are taking a careful look at the effectiveness of their personal data protection regimes. There are movements to seek consensus on developing privacy protections in increasing numbers of countries. In going forward, attention should be given to studying these approaches in order to learn best practices and to build consensus within the privacy, business and government community to ensure a balance between legitimate organisational interests in data flows and the need for protecting privacy in the 21st century. [13]

5. LITERATURE REVIEW

There have been number of efforts to make cyber security more effective in the context of anomalous behaviour. In this section, many literatures are studied to know more about cyber security in terms of user anomalous behaviour and various detection methods.

The comparison of traditional machine learning techniques with the most advanced deep learning approaches shows that both Deep Belief Networks and Stacked DE noising auto-Encoders achieved a substantial improvement by extracting features from high dimensional data during the pre-train phase. They proved also to be more convenient to deal with severe class imbalance. [1] There are two deep learning approaches to handle the high dimensionality of the search space and compare performance with logistic regression and random forest algorithms. [1]

The novel intrusion detection system employed a language-based approach to discovering the behavioural semantics underlying network traffic ows and use them as early signs of incoming malicious network activities. In particular, the system models the long-distance dependency between the structural patterns in history network traf c and possible incoming cyber-attacks. [6]

A new approach to identify anomalous behaviour based on heterogeneous data and a data fusion technique. The new anomaly detection technique which is recently introduced and known as empirical data analytics (EDA) is applied to detect the abnormal behaviour based on the datasets. It can be applied to clustering, classi cation, prediction and anomaly detection. This technique is a foundation of data analytics for statistic and streaming data analysis. In this paper, transfer learning and deep convolutional neural networks (CNNs) are applied to extract features from images of possible suspects [7].

The systematically review the current literature on DL approaches in BDA. Findings reveal that there are five features of DL which need to be considered in order to enhance the BDA. The features are (1) hierarchical layer, (2) high-level abstraction, (3) process high volume of data, (4) universal model and (5) does not over fit the training data [8]

Effective solutions will necessarily have to concentrate on encouraging people to take a longer term view when protecting their privacy and security. Sophisticates who are well-informed about the dangers of identity theft etc. may use pre-commitment devices without much prompting but for people who have limited knowledge or experience, psychological and emotional factors will exert signi cant impacts and so policies should be designed to take account of these subjective factors as well as objective ones. [7]

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This survey paper describes a focused literature survey of machine learning (ML) and data mining (DM) methods for cyber analytics in support of intrusion detection. Short tutorial descriptions of each ML/DM method are provided. [2]

In order to combat web based browser attacks, internet service providers and large organizations need to step up their efforts to directly protect their users against these attacks. Our proof of concept system with minimal hardware configurations, deployed at proxy level shows that a combination of client honeypots, real time antivirus scanning and matching user entered URLS against malicious website lists, provide an adequate level of protection while introducing low delay into a user online browsing experience. [9]

Three models were designed based on protection motivation theory (PMT), the reasoned action approach (RAA) and an integrated model comprising variables of these models. This research proposes to study how precautionary behaviour relates to or contributes to overall online behaviour. [10]

More speci cally, Convolutional Neural Network (CNN) is one of the powerful instances of deep models for doing image analysis. In order to achieve high accuracy in a speci c task like object recognition, CNNs are trained using a large training dataset. [19]

There are research papers and literature available which is describe in result and analysis section.

6. RESULT AND ANALYSIS

Cyber security can be controlled at the workplace in two ways. First is creating cyber security policies at enterprise level and to be informed to the employees. Secondly develop the automation using latest computer technology to control data breaches. The research paper review implies that there are new techniques are evolving for detecting anomalous behavior of employees which are useful to control cyber security in digital world. It is difficult to monitor manually to each individual at workplace, therefore there is need to include automated software which will help to analysis user behavior data at large scale and reported to concerned authorities for action against the compromised user.

6.1 Cyber Security policies at management level

Enterprises should defined the cyber security policies on the basis of following guidelines to secure the confidential data to avoid the loss of market, asset, brand and standard in the business due to data breaches and insider threats are as follows:

- Company should prepare their own cyber security policy on the basis of risk factors.
- Organize the cyber security policies awareness training for the employees time to time.
- Organize the induction for newly joined employees, in which cyber security must be included.
- Appoint cyber security executive to monitor the employee’s anomalous behavior in the organization.
- Give the limited access to the staff as per their key role in organization.
- Remove the privilege access given to the employees who have left the company.
- Remove the privileges access when it is not needed to the employees.
- To avoid access to the externals, nobody should use default password setting.
- Change the password on the basis of level of confidential data on regular basis.
- Design a secured password, so that it is not possible to guess or crack using password cracking techniques.
- There is risk of hacking due to unpatched software; therefore one should update the software on time.
- Motivate the employee’s accountability and ownership towards company. It will help to mitigate the risk of hacking.
- Undertaking should be taken from each employee that they will not misuse company information and follow all the cyber security policies of company. They are aware of punishment of not following the cyber security policies.
- Cyber security policy implementation and control by scheduling audit by expert.

6.2 Cyber Security policies for user’s anomalous behavior detection at technical level

The following are research and technology is used in detecting user anomalous behaviour to secure from insider.

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- Deep Belief Networks and Stacked DE noising auto-Encoders achieved a substantial improvement by extracting features from high dimensional data during the pre-train phase.[1] There are two deep learning approaches to handle the high dimensionality of the search space and compare performance with logistic regression and random forest algorithms.[1]
- The novel intrusion detection system employed a language-based approach to discovering the behavioural semantics underlying network traffic ows and use them as early signs of incoming malicious network activities.[6]
- A new approach to identify anomalous behaviour based on heterogeneous data and a data fusion technique. The new anomaly detection technique which is recently introduced and known as empirical data analytics (EDA) is applied to detect the abnormal behaviour based on the datasets. [7].
- The systematically review the current literature on DL approaches in BDA. Findings reveal that there are five features of DL which need to be considered in order to enhance the BDA. The features are (1) hierarchical layer, (2) high-level abstraction, (3) process high volume of data, (4) universal model and (5) does not over fit the training data[8]
- This survey paper describes a focused literature survey of machine learning (ML) and data mining (DM) methods for cyber analytics in support of intrusion detection. Short tutorial descriptions of each ML/DM method are provided.[2]
- The system also employs a notification system alerting user of a threat by sending warning messages through ICAP protocol if a website is detected to be malicious.[9]
- Three models were designed based on protection motivation theory (PMT), the reasoned action approach (RAA) and an integrated model comprising variables of these models. This research propose to study how precautionary behaviour relates to or contributes to overall online behaviour.[10]
- CNN principle is abstracted features is learned by stacked convolutional and sampling layers. It reduced parameters invariance, scale, and distortion. [11]
- A model for anomaly detection based on artificial neural networks with two hidden layers used Kera's Python library with the Theano backend for development and evaluation of deep learning models. Models based on a backpropagation algorithm for training of fully connected multiplayer perceptron (MLP) neural networks. We used a cross-validation technique to determine the number of neurons in each of the layers. Balancing techniques were employed as the original datasets are highly imbalanced. Classification of the RTL dataset achieved the worst performance measures due to noise in the dataset.[12]
- Anomalous activities that are not intrusive are flagged as intrusive, though they are false positives. Actual intrusive activities that go undetected are called false negatives. This is a serious issue, and is far more serious than the problem of false positives. One of the main issues of anomaly detection systems is the selection of threshold levels so that neither of the above problems is unreasonably magnified. Anomaly detection is usually computationally expensive because of the overhead of keeping track of and possibly updating several system profiles.[13]
- In [14], Privacy protection is studied based on behavioural intention which is a dependent variable of control beliefs, normative beliefs and attitude toward beliefs.
- In [2] There are several criteria by which the ML/DM methods for cyber could be compared: • Accuracy • Time for training a model • Time for classifying an unknown instance with a trained model • Understand-ability of the final solution (classi cation).
- In [15], it detects anomalous user behaviours based on the sequence of their requests within a web session. They first decompose web sessions into work ows based on their data objects to reduce anomalous workflows. Next, apply a hidden Markov model (HM M) to characterize work ows on a per-object basis. Clustering approach can achieve relatively low false positive rates while maintaining its detection accuracy.
- In [16], paper has shown that (Self Organizing maps) SOMs are quite efficient at aiding digital forensic investigators who are conducting a digital investigation to determine anomalous behaviours among the Internet browsing behaviour of individuals within an organization.

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- The models in [17] should not expose private information in these datasets. Addressing this goal, develop new algorithmic techniques for learning and a re ned analysis of privacy costs within the framework of differential privacy. Its' implementation and experiments demonstrate that it can train deep neural networks with non-convex objectives, under a modest privacy budget, and at a manageable cost in software complexity, training efficiency, and model quality.
- In[19] order to protect the data privacy against unauthorized tasks, researcher has used the Siamese architecture, creating a feature which is speci c to the desired task. This is in contrast to today's ordinary deep networks in which the created features are generic and can be used for different tasks. It removes the undesired information from the extracted feature results in achieving privacy for the user.
- In this paper [18] anomaly based detection mechanism detects any traffic that is new or unusual, and is particularly good at identifying sweeps and probes towards network hardware.
- In [20] this paper, focus on achieving a compromise between resource-hungry local analytics on a smartphone, versus privacy-invasive cloud-based services. We use smartphone as a system where tasks such as machine learning, speci cally. Deep Learning (DL), has been implemented successfully. Image analytics (e.g., gender classi cation, emotion detection, and face recognition) as examples of desired tasks. Recently, deep learning has been used for many image analysis tasks. More speci cally, Convolutional Neural Network (CNN) is one of the powerful instances of deep models for doing image analysis. In order to achieve high accuracy in a speci c task like object recognition, CNNs are trained using a large training dataset.

6.3 Government Cyber Security policies

The researcher has also reviewed the government policies, cyber laws, act circulated for data privacy and cyber security control for individual, business, reginal and national level.

7. CONCLUSION

Cyber security is the need of the today's digital world. It is necessary to ensure the cyber security to all the stakeholders. The transformation of business to eBusiness, marketing to eMarketing, commerce to eCommerce, shopping to eShopping, banking to eBanking and so on is taking place. The workplace without digitization is exceptional case. Therefore need to have strong cyber security policies and its implementation at workplace to secure the organization from insider and outsider threats. This research reviews the literatures which are working in this direction on management level and technical level. It gives insight of the automation in cyber security control through policies and its implementation. In future, artificial intelligence, cloud computing, mobile computing, data analytics, user behaviour analytics provides the security solutions to control the user's anomalous behaviour at workplace to control and report the fraud cases to authorised person.

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DIGITAL INDIA-TARGETING OVERALL GROWTH: A CRITICAL ANALYSIS

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ABSTRACT

Digital India is an initiative of Government of India to transform India into digitally empowered society and knowledge economy. The launching of Digital India program in 2014 ushered the nation into the league of countries that are transforming their governance and economies with the power of technology. Since then, this dream project has touched upon almost all aspects of our lives, ranging from travel, work and communication to healthcare, education and shopping. The booming telecom sector, increasing Internet penetration and growing mobile devices are the reason behind the push for Digital India. This ambitious program was started to ensure that the citizens are getting engaged in the innovation process which is necessary for the economic growth and sustainable development of the country. To evaluate the full potential of this program, it is essential to address certain challenges on the way of its successful implementation like poor infrastructure, digital illiteracy, low internet speed, lack of coordination among various departments etc. This paper aims to provide an overview of Digital India, some selected initiatives, roadblocks, and recommendations for the way forward. Finally, it is hoped that this paper will throw some light on taking Digital India forward to transform the landscape of India.

Keywords: Digital India, e-governance, digital society, digital technology, Knowledge economy.

INTRODUCTION

Digital India is a revolutionary initiative by the Government of India launched on 2 July 2015 that has transformed our country into an empowered economy. India is becoming digital because of increasing adoption of technology, energetic youth population and emphasis on cashless transactions. The campaign forecasts a complete digital transformation of society and the development of a knowledge economy. The program has played a key role in improving the quality of life of citizens by providing access to services on mobile devices and digital identity. After restructuring and refocusing, existing schemes and initiatives have been brought under three vision areas and nine pillars of *Digital India*.

Figure 1 shows the three vision ideas of the ‘Digital India’ Initiative and Figure 2 shows the nine pillars based on three vision areas. The nine pillars are: broadband highways, universal access to mobile connectivity, public internet access program, e-governance, e-kranti, information for all, electronic manufacturing, IT for jobs, and early harvest programs. They form the base for each and every scheme under ‘Digital India’.

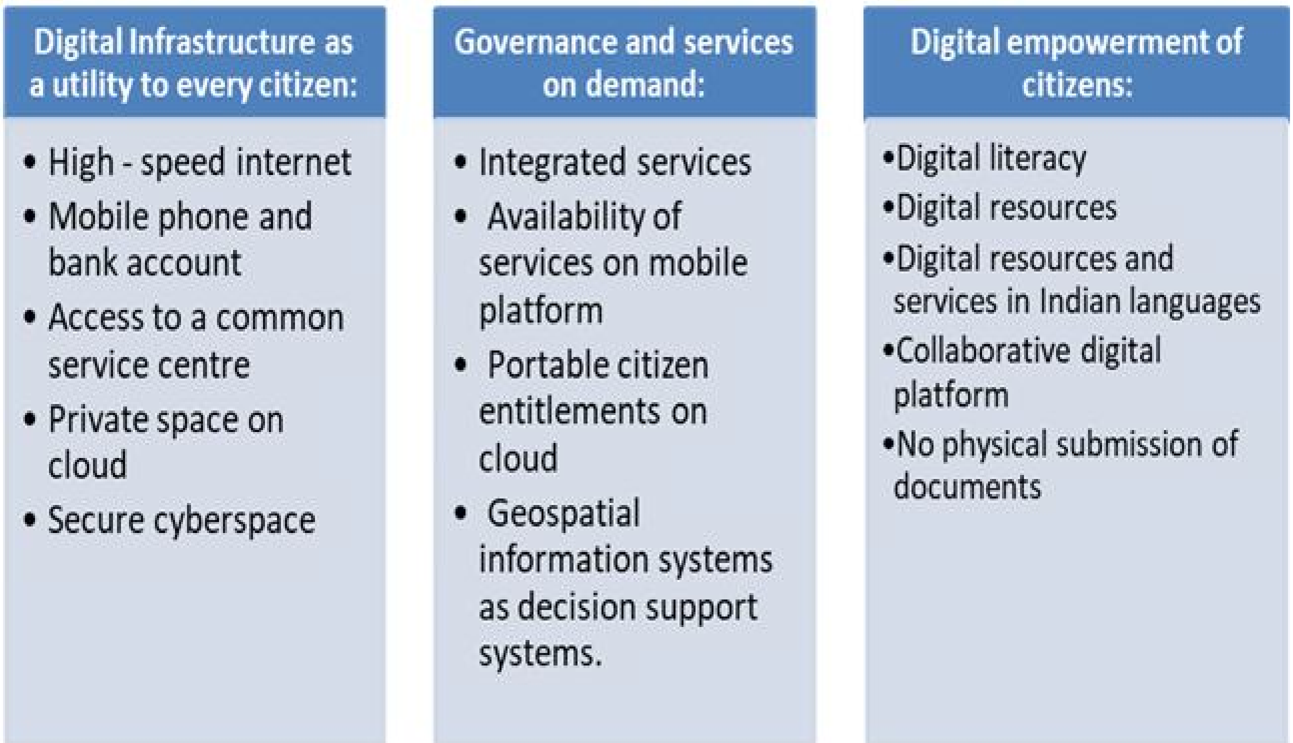

Fig-1: Digital India: Three Vision Areas

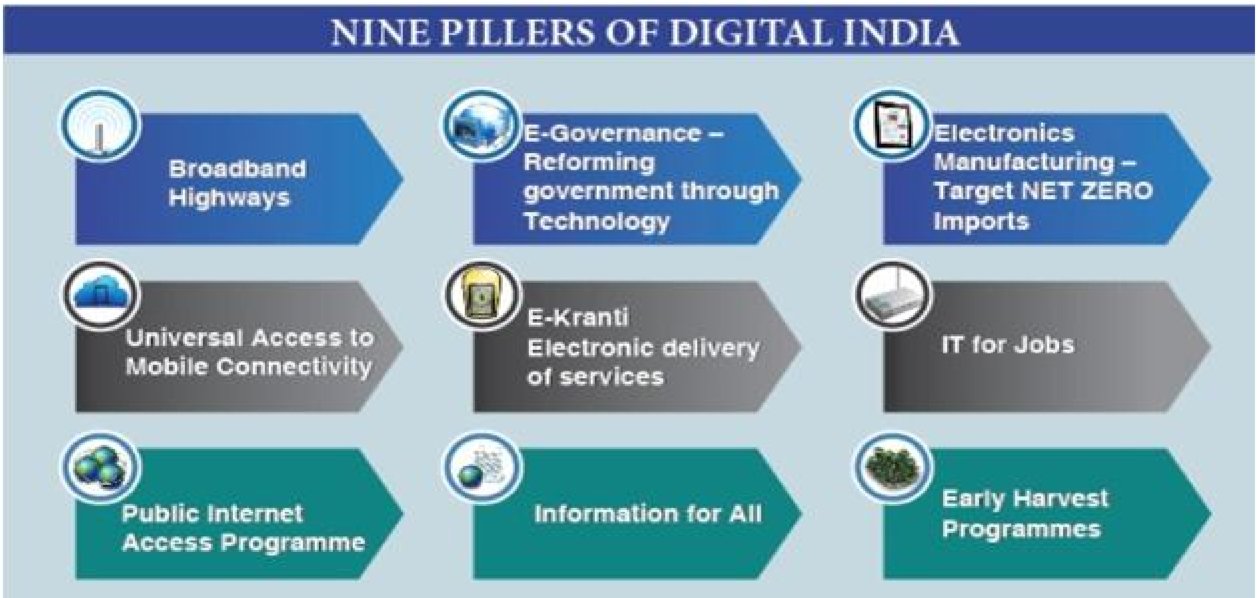

Fig 2: Digital India: Nine pillars based on three vision areas areas [1]

Numerous researches from various disciplines have shown interest in 'Digital India' initiative because of its great significance and influence on the economy as a whole and particularly the technological sector. **Gupta and Arora** [2] studied the impact of digital India project on India's rural sector and concluded that Digital India programme has set the stage for empowerment of rural Indian women. **Arvind Gupta** [3] studied that Digital India movement will play an important role in effective delivery of services, managing projects, monitoring performance and improving governance. **Midha** [4] studied that digital India is a great plan for the development of India for knowledge future but its improper implementation due to inaccessibility and inflexibility to requisite may lead to its failure**. Sundar Pichai et al.** [5] worked on Digital India and its preparedness to create jobs opportunities in the information sector. **Microsoft CEO and Satya Nadella** [6] has shown interest to become India's partner in Digital India program.

RESEARCH METHODOLOGY

It is based on secondary data of National & International Journals, government reports, books, articles, newspapers and magazines covering wide collection of academic literature on 'Digital India'. Being an explanatory research, descriptive research design is adopted for achieving more accuracy and rigorous analysis of research study.

Main Research objectives of the study are to understand the concept of 'Digital India', to examine the features of 'Digital India', to evaluate the opportunities and challenges with special reference to 'Digital India' and to find out the practical solutions and innovative ideas to achieve the objectives of 'Digital India'.

DIGITAL INDIA: MAJOR INITIATIVES TAKEN BY THE GOVERNMENT

The ambitious 'Digital India' is a dream project of the government for the citizens and Industries of India which could help in connecting the various past and present projects to bring India to a global platform. It aims to ensure easy access to technology infrastructure and government services to every citizen of India. The main objective is to transform the country into a digital economy with participation from rural, urban citizens and business organizations to ensure that all government services and information are available anywhere, anytime, on any device that is easy-to-use, highly available and secured. Some of the initiatives of Digital India are discussed below:

1. Digital payments in India: India is achieving a massive upswing in Digital payments. The shift from a cash-based economy to a paperless, card-based and mobile transaction economy has been dramatic. According to NITI Aayog, the volume of digital transactions in 2016–17 touched 10.9 billion INR, registering a growth of about 55% over 2015–16 [7]. All modes of transfer like Real Time Gross Settlement (RTGS), National Electronics Funds Transfer (NEFT), debit cards, digital wallets and Unified Payments Interface (UPI) have shown positive growth from October 2016 to April 2017 [7].

2. E-education (SWAYAM)*:* The Study of Webs of Active – Learning for Young Aspiring Minds (SWAYAM) project aims to provide learning opportunities to students anytime, anywhere and at any place, but within a structured curriculum. It consists of free of cost massive open online courses (MOOCs) from 9th standard to PhD in a controlled environment.

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3. AADHAAR and DBT: Aadhaar plays a pivotal role in the government's strategy for inclusive growth. Aadhaar-enabled Direct Benefit Transfer (DBT) is one of the major governance reforms to achieve greater transparency and accountability in public service delivery. It encompasses subsidies and benefits that may be either in cash or kind as well as services. Aadhaar provides for accurate and targeted beneficiary identification through its authentication services (biometric/demographic/OTP based). Now Aadhaar has considered as a financial address by allowing for transfer of 'cash benefits' directly to beneficiaries' bank accounts without requiring their bank account numbers and IFS Codes. As per latest government records, savings due to Direct Benefit Transfer (DBT) over the last three years have touched 50,000 crore INR [8].

4. E-health: Transformation in the health industry: Technology can play a vital role in improving the delivery of health services [9] and how policy-related decisions are made. Globally, the healthcare sector is going through a transformation with the aim of accomplishing a subset or all of the following objectives:

- Data-driven policymaking because of the presence of adequate data in digital form.
- Comprehensive services by integrating information of the patient across multiple health IT systems, sub-centres and centres to obtain a comprehensive record
- Offer personalized consultation because of the presence of digital data
- Single-window online channel to offer wide range of healthcare services

5. Internet connectivity in rural areas: Broadband Internet has a significant role in the economic growth of the country. As per Ericsson and Imperial College report, a 10% increase in mobile broadband adoption may drive a 0.6–2.8% increase on average in economic growth [10]. A report by TRAI has mentioned that as on 31 April 2017, there are 276.52 million broadband subscribers in India, which is the second highest in the world [11]. The key drivers behind this huge subscriber uptake are a growing smart young population with increasing digital capabilities, and decreasing cost of smartphone, also continued deployments of 3G and 4G mobile broadband technologies in developing markets.

6. Smart Cities: The Government of India launched the Smart Cities Mission (SCM) on 25 June 2015 with a view to improve quality of life and accelerate growth in the urban sector. The SCM was formalized to digitally transform the public services offered to a citizen from utilities like an LPG connection to surveillance and traffic control.

7. Digital democracy with MyGov [1]: Every Citizen wants to be a part of governance and share their inputs on matters related to policymaking. Before 2014, there was no medium for citizens to contribute to decision making as well as be a partner in governance. MyGov is an innovative platform launched in the year 2014, to foster citizen and government partnership for driving inclusive growth of India. It involves people in policy formulation and programme implementation. The engagement methodologies of this platform include discussions, tasks, quizzes, polls, surveys and blogs. MyGov enables various departments to harness the talent and knowledge of citizens to not just refine policy documents but also seek creative inputs such as mascots, logos, videos and songs for upcoming projects or policies.

Apart from above mentioned areas some other facilities provided by 'Digital India' initiative are Digi Locker [12], swacchh bharat mission mobile app, electronics development fund, centre of excellence on internet of things (IoT), wi-fi hotspots etc.

ENABLERS OF 'DIGITAL INDIA'

Governments of India is promoting various technologies such as the cloud, big data analytics, machine learning, blockchain and Artificial Intelligence. These technologies have become the foundation for 'Digital India' Program. Also, there are numerous schemes like the Common Service Centres (CSCs) scheme, Post offices, Services through retail shops, fair price shops and telecom towers for attacking the digital divide [13].

DIGITAL INDIA: ACHIEVEMENTS AND SCOPE

The key idea behind the ambitious 'Digital India' program was, empowering the poor and the underprivileged. Digital India has certainly helped in increasing the awareness level about internet and employment in rural areas of the country. This program would enable every citizen to easily access wireless internet, promote the use of digital platforms, and make e-Services available to people in the effective manner. Internet and mobile connectivity in the remotest communities of India will enable them to elevate their knowledge level, awareness level and finally socio-economic status. The basic idea is to realize IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow).

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It can play a main role in macro-economic factors such as productivity of the workers, GDP growth, growth in number of businesses and employment generation. The World Bank report suggests that a 10% increase in mobile and broadband penetration increases the per capita GDP by 0.81% and 1.38% respectively in the developing countries. According to analysts, the ‘Digital India’ initiative could boost GDP up to $1 trillion by 2025. With 1.16 billion wireless subscribers, India is the second largest telecom market in the world and with almost 259 million broadband users, it is the world’s third largest Internet market [14].

The Digital India plan will be helpful in providing real-time education and address the challenge of lack of teachers in education system with the help of smart and virtual classrooms. Through mobile devices, education to farmers and fishermen can be provided.

The biggest tax reform in India, GST Network, is ready for translating nearly two billion invoices into digital formats from July1,2017. Services like Aadhaar are designed to move India towards queue-less future, a paperless environment, and moreover a cashless economy.

The government is leveraging technologies like mobile, cloud computing, analytics, Artificial Intelligence and Internet of Things to ensure effective implementation of the Digital India program, which is in turn associated with program such as Smart Cities and Make in India. A few achievements in e-governance projects are Digital Locker [12], ebasta, the linking of Aadhaar to bank accounts to disburse subsidies.

The country’s digital Infrastructure-Bharat Net, has created a common service centre for each and every panchayat. As per the report by Akamai (a US-based content delivery and cloud service provider), India’s average broadband speed is 23.5 Mbps and maximum speed is 25.5Mbps [13]. Top Tech Companies are in agreement with the vision of ‘Digital India’ and their executives are willing to invest resources for the same purpose.

DIGITAL INDIA: MAJOR CHALLENGES

In rural areas, most of the population have no Internet connection. The content in regional languages is not sufficient enough to keep the readers engaged. Despite the increasing affordability of ICT environment in the country, only 20% of the households can access the Internet, and few people can access mobile broadband.

According to World Economic Forum (WEF) report of 2016, about 33% of Indian population is functionally illiterate and one-third of youth do not attend secondary education [7]. There is a huge gap in metropolitan cities and remote rural areas, where even a basic service like electricity is unavailable to run the Digital India program.

India is now on the radar of cyber attackers because of the India’s growing economy and digital push. A disturbing wave of cyber-attacks could soon badly impact the country.

The slow and delayed infrastructure development is the biggest challenge faced by ‘Digital India’ plan. There are various challenges right from policy making, changing the work flow up to changing the mentality of the government officers in the successful implementation of ‘Digital India’.

There should be an active involvement of various departments such as telecommunication, justice, finance and planning, health department etc. They need to be integrated, without a smooth teamwork between them, ‘Digital India’ mission would never be implemented to its full strength.

Finding vendors who can provide applications and services to cater to local needs, has become a major challenge. Though there are various resources available in India, but there is a huge capital cost which need to be invested.

India is a diversified nation, in terms of culture, language, ethics, laws which vary from states to states so complete integration, that is integration of technology and language, is one of the main challenges to accomplish the ‘Digital India’ mission.

Net neutrality is an important factor and it is required to understand that ‘Digital India’ without net neutrality would be a great blow to entrepreneurs and citizens of India.

According to a joint report by Assocham-Deloitte, the ambitious ‘Digital India’ plan is facing multiple challenges in its successful implementation due to lack of clarity in policies and infrastructural bottlenecks [13]. For the large-scale impact of ‘Digital India’ on citizens of the nation, the digital divide needs to be addressed. Currently over 55,000 villages remain deprived of mobile connectivity as providing mobile connectivity in remote rural areas is not commercially viable for service providers.

CONCLUSION

Despite a few remarkable achievements, many more challenges need to be overcome in *'Digital India'* campaign. The WEF Report is a reminder in this regard to the government which underlines the need to realize the positive impact of 'Digital India' mission and other related programs. As in the case of civic infrastructure projects like roads and metro, public-private partnership models must be explored for sustainable development of digital infrastructure. Moreover, start-ups need to be incentivized for digital infrastructure developments in rural and remote areas. The success of the 'Digital India' program is depending on the awareness of the residents and institutions about different government services being delivered at points of digital presence. Post offices should be utilised for publicity, promotion, and marketing of such government services. It is must to build an exclusive fully firewalled India Internet Cloud that can provide secure internet network and connectivity for the various needs of the country. The overall development and growth can be realized through supporting and enhancing elements such as basic infrastructure, digital literacy, overall business environment, regulatory environment, etc. There should be an additional spectrum available to telecom service providers for deployment of high speed data networks for the extreme cases of disaster/crisis management, administration, and security purposes. And also Government should have exclusive own communication network for the same. Government must ensure that telecom facilities, internet, smartphones, products and services are available, accessible and affordable to the common man. It would be possible to achieve the objectives of 'Digital India' programme only when all the citizens would be mentally prepared for the coming challenges in implementing the policy. Although we have covered a lot of ground thus far, there is much more scope and an enormous unfinished agenda for India to explore and transform as 'Digital India' initiative is in infant stage.

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GI CLOUD-MEGHRAJ'-KEY PILLAR OF e-GOVERNANCE SYSTEM IN INDIA

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ABSTRACT
E–governance is the use of Information and Communication Technologies (ICT) to provide services to the citizens, interaction with business organizations and communication between different Government organizations. Cloud Computing is one of the key pillars on which various e-Governance services would ride. It has the ability to transform the manner IT is consumed and controlled, ensuing in improved cost efficiencies, increased innovation, quick time-to-marketplace, and the potential to scale applications on call.

Government of India has embarked on 'GI Cloud-MeghRaj,' a National Cloud Initiative aimed at hosting various government applications and services on the cloud. This paper states the Government of India's vision and policy towards establishing and implementing the GI Cloud. It also identifies the potential risks and challenges of GI Cloud, and its key drivers and benefits. This paper describe how this newly emerged paradigm of Cloud Computing Services can be helpful for e-Governance in India.

Keywords: e-Governance, ICT, Cloud Computing, GI, Services

1. INTRODUCTION

In modern era people want to know about the global information on tips. The Government of India has made an E-Governance policy to deliver public services to all over India. The Government of India has implemented number of ICT initiatives under the National e-Governance Plan (NeGP), including creation of ICT infrastructure at the centre and state levels. The infrastructure created will offer the basis for adoption of cloud computing for the government with the goal of making best use of infrastructure, re-use of applications, efficient service delivery to the citizens and increasing the number of e-transactions in the country.

To use the benefits of cloud, Department of Electronics and IT (DeitY) of Government of India has initiated a project named as 'GI Cloud-MeghRaj'. The 'GI Cloud' is the Government of India's cloud computing environment that is used by government departments and agencies at the centre and states. it enables the government to leverage cloud computing for effective delivery of e-services. This includes the formation and implementation of a cloud computing environment at a national level which act as a common repository of cloud-based infrastructure resources and applications available on a sharable basis.

1.1 E-GOVERNANCE

Government has launched various e-Governance programs at different levels to provide services and information to the citizens and businesses. ICT (Information and Communication Technologies) has been introduced in various levels for enhancing e-Governance level. E-Governance delivers various web-services irrespective of the geographical and language barriers.

The four main kinds of e- Governance applications:

Government to Government (G2G): Administration, Policy formation etc.

Government to Business (G2B): Taxation, Tender etc.

Government to Consumer (G2C): Land record, Birth certificate etc.

Government to Employees (G2E): Income tax, Pension etc

Now-a-days Governments are providing citizen services via e-Government, so there is a opportunity for all citizens all over the country to have some form of access to these e-Government services.

1.2 CLOUD COMPUTING

The US National Institute of Standards and Technology's (NIST) definition of cloud computing has been adopted by the Government of India for GI Cloud. It states:

"Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction".

The model includes of five essential characteristics (on-demand self-service, ubiquitous network access, metered use, elasticity and resource pooling), three service models (infrastructure as a service, platform as a

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service and software as a service), and four deployment models (public cloud, private cloud, community cloud and hybrid cloud). These have been shown in the figure below.

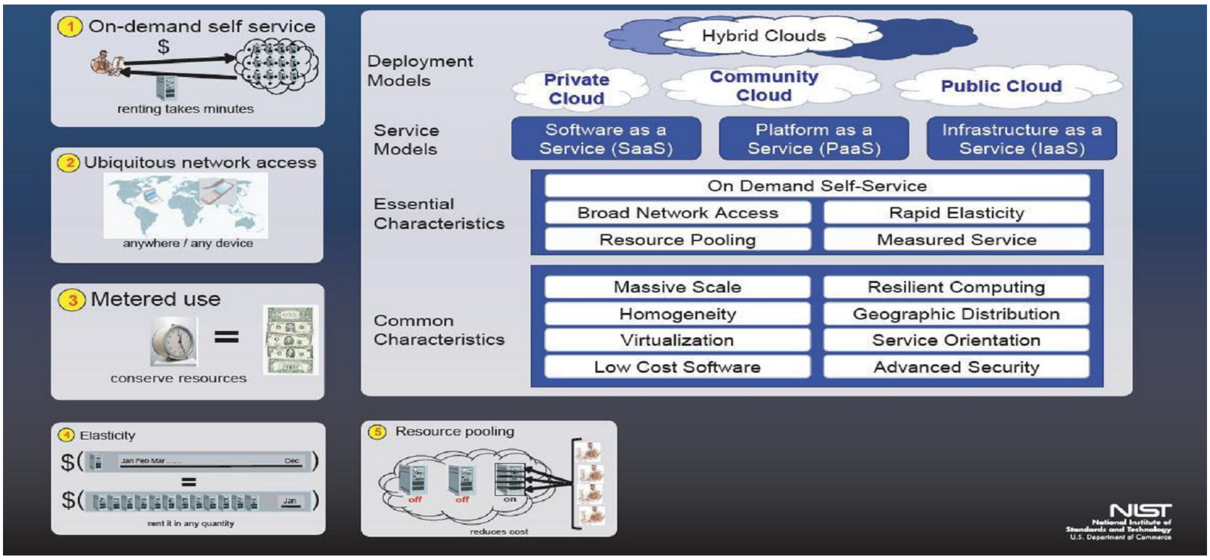

Figure-1: Visual model of NIST Working Definition of Cloud Computing

1.2.1 ESSENTIAL CHARACTERISTICS OF CLOUD COMPUTING

- On-demand self-service
- Broad network access
- Resource pooling
- Rapid elasticity
- Measured service

1.2.2 CLOUD COMPUTING SERVICE MODELS

Infrastructure as a Service-IaaS: This covers storage as a service and allows users to use virtualized IT resources for Computing, Storage, and Networking.

Platform as a Service-PaaS: The Cloud Platform is an Integrated Computer System consisting of Operating Systems, Software Applications, and Middleware Software's.

Software as a Service-SaaS: The SaaS model provides Software Applications as Service.

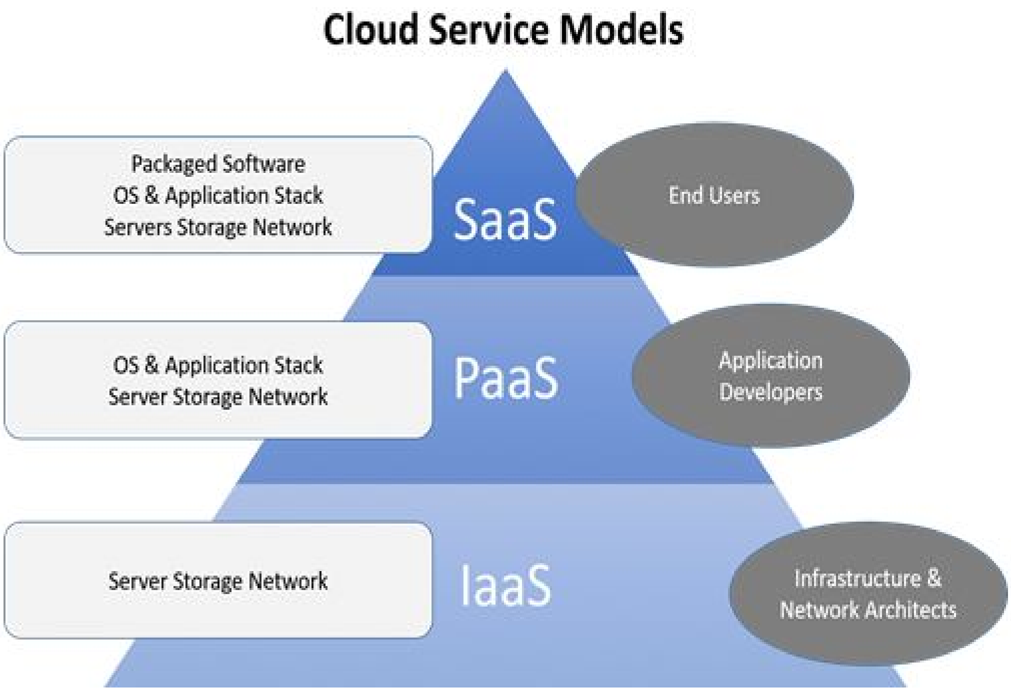

Figure-2: Cloud Computing Service Models

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1.2.3 CLOUD COMPUTING DEPLOYMENT MODELS

Public Cloud

The cloud infrastructure is made available to the general public or a large industry group and is owned by an organisation selling cloud services.

Private Cloud

The cloud infrastructure is exclusively used by a single organisation comprising multiple consumers.

Hybrid Cloud

The cloud infrastructure is a composition of two or more cloud infrastructures such as private, community, or public that stands as unique entities but are bound together by standardized technology.

Community Cloud

The cloud infrastructure is for exclusive use by a specific community of consumers from organisations that have shared concerns. It may be managed by the IT organization or by a third-party.

2 GI CLOUD: OBJECTIVES

Government of India's objectives in implementing a cloud computing strategy is:

- Optimal utilisation of infrastructure
- To speed up the development and deployment of eGov applications
- To avoid duplication of effort and cost in development of similar applications
- Availability of applications ensuing common standards at one place

3 GI CLOUD: ARCHITECTURE

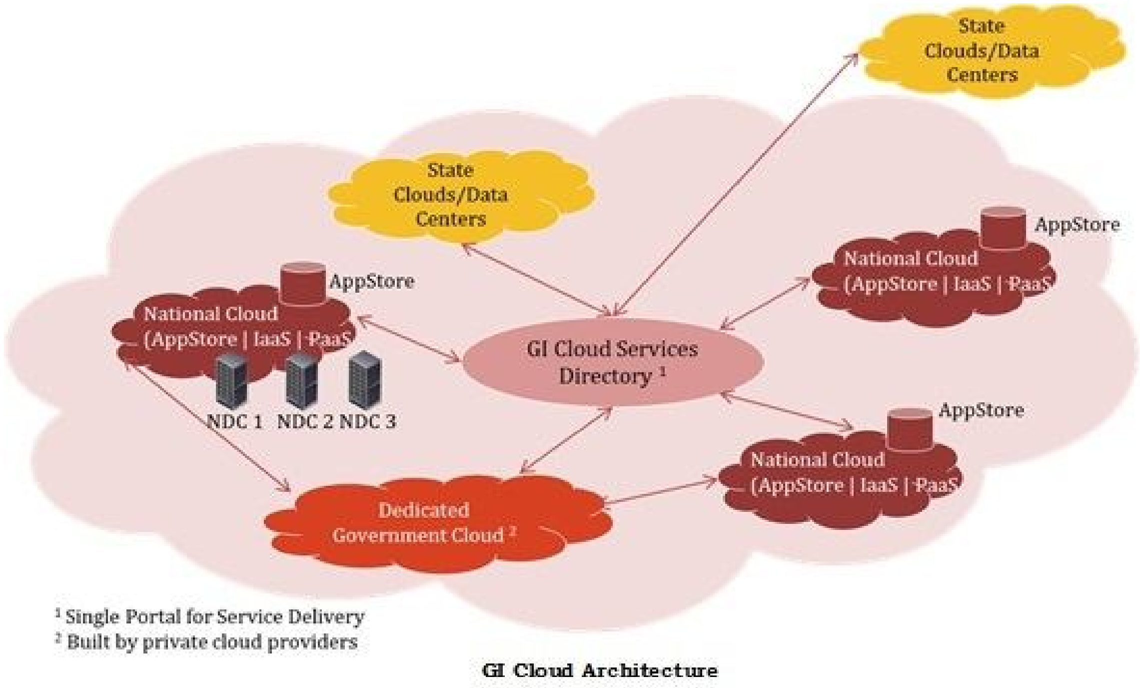

Figure-3: GI Cloud Environment

The architectural vision of GI Cloud consists of a set of discrete cloud computing environments spread across multiple locations, built on existing or new infrastructure, following a set of common protocols, guidelines and standards issued by the Government of India. The GI Cloud services will be published through a single GI Cloud Services Directory.

GI Cloud consists of cloud computing environments at the national and state levels termed as 'National Clouds' and 'State Clouds'. One of the National Clouds will be built utilising the infrastructure available under the National Data Centre(s), while other National Clouds may also be established. The willing state clouds built on state data centres can also associate themselves with the GI Cloud and publish their services in the GI Cloud Services Directory. Shared and reusable applications and services at National and state level will allow any government department to accelerate its e-Governance progress by using applications host on 'eGov AppStore'.

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4 COMPONENTS OF GI CLOUD

GI Cloud includes the following components

- Cloud computing platforms
- e-Gov Appstore
- GI Cloud Services Directory
- Common set of protocols and standards
- Cloud Service Providers
- Cloud Management Office

5 SERVICES PROVIDED BY GI CLOUD

Infrastructure-as-a-service (IaaS): Compute, storage and network will be made available on-demand pay-per-use model to centre and states departments.

Platform-as-a-service(PaaS): Platforms like programming languages and tools for development and testing of applications will be made available on-demand for hosting of applications on the GI Cloud.

Software-as-a-service (SaaS): Applications can be made available in the GI Cloud through the eGov AppStores or in a pure SaaS model. The eGov AppStores will host both cloud and non-cloud enabled applications.

Data-as-a-service (DaaS): GI Cloud will also look at data as a service which is similar to SaaS and the data can be provided on demand to the user.

6 BENEFITS OF GI CLOUD

Efficient Service Delivery: GI Cloud provide the framework for easy and quick access to ICT resources which will lead to a faster service delivery of citizen-centric services by the government.

Utilisation of Infrastructure: The GI Cloud can be built on the existing infrastructure, so it will enable optimum utilisation of infrastructure and reduce the duplication of cost and effort.

Deployment and Reusability: Applications developed by one department at the centre or states can be made available on the e-Gov AppStore. These applications can be deployed and re-used by other departments.

Manageability and Maintainability: The GI Cloud will provide a single directory of services providing integrated visibility and control helping departments in managing and maintenance of ICT infrastructure.

Scalability: When there is a huge demand for ICT resources, applications and infrastructure deployed on the common GI Cloud platform can easily scale as required.

User Mobility: Cloud will enable user mobility over shared data and applications, anytime when authorised.

Cost Reduction: using pay-per-use model of pricing, Cloud ensures that ICT resources and applications are made available without heavy investment.

Standardisation: GI Cloud consist of the framework for citizen services to comply with standard practices and remove vendor lock-in scenarios.

Security: A security framework for GI Cloud will lead to less complexity and potential vulnerability of the environmental

7 RISKS & ISSUES OF GI CLOUD

Cloud Standards:

Existing cloud standards pertaining to implementation, storage and migration need to be interpreted to understand their applicability for the GI Cloud environment.

Integration: Cloud based applications need to be integrated with existing on-premise legacy applications.

Security and Privacy: Risk of unauthorized access to personal and confidential information and intellectual property.

Licensing: A comprehensive framework will be developed on the usage of various licensing models.

Portability: Applications developed on one platform may not be portable to, or executable on another.

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Location of data: There is uncertainty of location of data because of the dynamic nature of cloud. This raise the concerns related to data accessibility, privacy and security.

Performance: Guaranteed service levels are achieved in the GI Cloud else it may affect effective service delivery. Fully functional 24x7 helpdesk may be incorporated.

Application Design: New applications must be designed, and existing applications need to be customised in line with cloud design principles.

8 CONCLUSION

With cloud computing there is a scope of speeding up the development and roll out of e-Governance applications, enhancing agility in customising and deploying ICT to meet specific business needs, while at the same time increasing government ICT efficiency.

The National e-Governance Plan (NeGP) has led to the creation of common ICT infrastructure such as State-Wide Area Networks (SWANs), State Data Centres (SDCs) and Common Service Centres (CSCs) as well as development of guidelines and standards to ensure interoperability, standardization and integration of various services to provide a single face of the government to the people.

The GI Cloud (MeghRaj) initiative focus on setting up an eco-system for cloud adoption by the Government, leveraging the existing infrastructure. However, the legal, contractual, economic and security aspects of cloud computing are evolving and are yet to attain maturity in terms of technology or business readiness and adoption by market . The key focus areas have been–data loss, data protection, security and privacy, data jurisdiction, standardisation, governance, copyright, legal and commercial issues. A comprehensive security framework for the entire GI Cloud is thus proposed with the objective to minimise the potential vulnerabilities from adoption of cloud.

It is concluded that the GI Cloud gives a powerful arrangement to pretty much every issue looked to execute the E-Governance effectively. The Cloud offers consistent incorporation with all the advances present today. The ventures of E-Governance can be intensely profited with the presentation of Cloud Framework.

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SMART EDUCATION THROUGH WEARABLE TECHNOLOGY - NOVEL INNOVATION IN INTERACTIVITY IN EDUCATION

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ABSTRACT
Wearable technology potentially has the most impact in the fields of health and fitness, the technology also promises great influence on Education. Augmented reality and wearable technology can combine to create a much more realistic and immersive environment in real time making learning interesting and active. The key to revolutionizing the classroom is not just by adding technology, but rather by the ways that technology will be introduced. Students have different types of intelligence, they do not all learn the same way. To serve all students effectively, learning should be both personalized and customized. It provides the similar class room interaction experience virtually and also becomes an alternative option for students who left studying due to poor performance or unstable life experiences. With that in mind, developers and analysts predict that wearable technology will very quickly change the technological and cultural landscapes once again, and may even change the nature mode of teaching and learning.

Keywords: Wearable technology, learning, personalized, customized, Education.

INTRODUCTION
Imagine a world where everything is smart and connected, a world where every product from washing machines to light switches, pacemakers to hospital gowns, wristwatches to running shoes can provide useful data that make our lives better and easier, where thousands of wireless sensors networks help optimize crop planting and irrigation, monitor avalanche and forest fire conditions, regulate city water systems and automobile traffic. That's the world of the Internet of Everything (IoE). And it's coming faster than most people think.

Innovation is the buzzword today and a group of innovators/entrepreneurs in the field of media, technology and communications has developed products which may be considered mundane into smart ones with the intelligence to provide with inputs which have the potential to change your day-to-day life. One of the potential to be talked about is the Wearable Technology, having immense potential of growth in the coming years.

Wearable Technology is the incorporation of matching new computerised technology into everyday fashion. It is a computer that could be worn on the body ranging from a small wrist mounted system to a bulky head mounted display or bare necessities like shirt, watch, glasses . These computers are especially useful for applications that require computational support while the user’s hands, voice, eyes, arms or attention are actively engaged with the physical environment. It helps in obtaining information about the surroundings or about one self.

OPPORTUNITIES THAT CAN HELP TO RENDER CHANGE IN EDUCATION INTO QUALITY EDUCATION
Educational system responds to trends which will determine not only its value to its students but ultimately its long-term value to society. It is important to understand the areas which would help the rate of change and direction of developing realistic and actionable strategies for education policy, investments and programs.

The following areas of concern can help in achieving quality education

1. Intensive use of technology in teaching and learning
For the first time in history we have a generation of digital natives, the students of the Internet generation have grown up immersed in the use of information technologies. Unlike generations past, these students are at ease with technology and easily adapt and integrate new functionality from smart phones, laptop computers, mp3 players, game stations, and virtual reality worlds. They arrive at school expecting to leverage technology in the learning environment just as they do in their personal lives. In much of the world today, young people have come to depend on digital resources for communications, learning and entertainment activities at home, school or workplace. This revolution of mobile technology is being driven by innovations in the consumer marketplace.

New devices and services are being introduced around the world, even in emerging market economies. Broadband local wireless, radio frequency, and satellite devices are enabling new services and greater access in many regions. A plethora of new devices will emerge over the next decade as microchips proliferate, technology becomes more affordable and connectivity becomes globally pervasive.

2. Wearable Technology

In education can wearable technologies have impetus significance is a note flying under the radar. New wearable technology innovations have transformed the learning and teaching process in which students deal with knowledge in an active, self-directed and constructive way. As an educational tool, wearable technology can help children exercise their creativity and innovation and interact with their surrounding in an easier and a more natural way.

It provides opportunities for students to learn more quickly and access information with less effort or mental input. It is important to keep in mind that using wearable technologies in teaching and learning process is very different from the traditional learning experience where students come to class at a fixed time and location. Teachers should learn how to manage effectively the new learners and how to use effectively wearable technologies in an educational setting. These technologies can be used in education to develop student's skills for cooperation, communication, problem solving and lifelong learning.

Some examples of wearable technology that can be used in education are Autographers, Keygloves, Muse (Brain-sensing headband), Virtual Reality (VR), Smart Watches, GoPro, and Google Glass.

The **Autographer** helps students to capture photos of the teacher's direct notes. So, they will always have exact information from their teacher. It is a new type of camera which has been custom built to enable spontaneous, hands-free image capture. Its world leading technology includes a custom 136° eye view lens, an ultra-small GPS unit and 5 in-built sensors. These sensors are fused by a sophisticated algorithm to tell the camera exactly the right moments to take photos.

Keygloves are wireless open-source input glove that can provide flexibility and convenience for gaming, design, art, music, data entry, device control, 3D object. This device can also facilitate singlehanded tasks and is perfect for handicapped or disabled users.

Muse, a brain sensing headband can display students' brain's activity directly onto a smart phone or tablet. When students are working on a project or studying for an important test, for instance, it can be used to measure their brainwaves and detect what activities they need to be active in and can help their mind stay focused and less stressed out.

Virtual Reality (VR) gives students an opportunity to get hands on experiences and increases their knowledge. It can present complex data in an accessible way to students which is both fun and easy to learn. Students can interact with each other as well as they can interact with the objects in that environment in order to discover more about them.

Smart watches are able to provide information and remote applications like camera, fitness applications and games, tools applications for measurements and calculations for students. All of the facilities afforded by smart phones are squeezed into Smart watches. Utilization of smart watches in education is been found that this technology can enhance learning outcomes and allows students to access education flexibly, calmly and seamlessly.

iPod technologies is as an effective learning tool can empower students to think more creatively about their subject matter and encourage the development of collaborative learning. Hence, it gives a sense of self-empowerment and autonomy to the individual.

GoPro is an interesting and unique camera that has the ability to capture students and teachers' view of events, to record instruction, and to explore novel possibilities and helps teachers to examine their students' behaviours and to make more informed pedagogical decisions.

Another awesome innovation is **Google Glass** a web connected wearable computer connected to a micro-computer can help display voice and information on the screen. Through it teachers and students can share information in various modes of interaction by using this technology. It can be integrated with simulation based learning exercises for students increasing their learning capacity. It can also help revolutionize medical education which will allow students to watch medical procedures in real time.

In the case of higher education, wearable technology is a natural fit. Not only does it enhance a student's ability to better interact with their environment, they can more easily access information and resources.

REVIEW OF LITERATURE

Quality in education through wearable technology has been widely discussed & debated issue all over the world. There has been lot of contribution by many journals, Articles, research papers, University rating agencies etc. Some the contribution as a part of review of literature is given below:-

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1.	Gates, K., Key Questions for Communication and Critical-Cultural Studies: Posthumanism, Network Infrastructures, and Sustainability. Communication and Critical/ Cultural Studies 10(2-3), 242–247 (2013)	The research paper discussed about Wearable technology is designed to literally integrate bodies more seamlessly with devices. It allows integrating bodies into network infrastructure.
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4.	Starner, T.: Wearable computing: through the looking glass. In: Proceedings of the 17th Annual International Symposium on International Symposium on Wearable Computers, pp. 125–126. ACM (2013)	The research paper discussed about Design principles for creating "micro interactions" with wearable devices and to create interactions to fit a user's lifestyle.
5.	Hong, J.: Considering privacy issues in the context of Google Glass. Communications of the ACM 56(11), 10–11 (2013)	The research paper discussed about Gap in the community's understanding in the use of wearable computers.
6.	Furlan, R.: Google Glass this wearable computer augments the self, not reality. IEEE Spectrum 50(10), 24 (2013)	The research paper discussed about the use of wearable technology will enable to create a wide range of augmented cognition applications.
7.	Wearable Computing: It's Application and Devices-International Journal of Scientific & Engineering Research, Volume 4 by Arun kumar Singh and Deepshikha Agarwal	The research paper discussed about the importance of collaboration of wearable technology in various sectors of industry.

OBJECTIVES OF THE RESEARCH

1. To understand the awareness of use of technology in learning and teaching.
2. To study the importance of learner centred learning towards creation of quality in education.
3. To analyse the role of technology in creating quality education.
4. To understand the implementation of wearable technology in education
5. To study the role of wearable technology in teaching and learning.

HYPOTHESES OF THE STUDY

1. Technology plays an important role in learning and teaching by better collaboration, assimilation of knowledge for skill development.
2. Learner centric learning with use of technology can create understanding of the skill and interest of the child for better quality development of the personality and intellect of the child.
3. Technology plays a very important role in creating quality education through development of skill based learning and teaching techniques.
4. Wearable technology helps in creating environment for better learning and teaching there by developing modules of quality education.
5. Various tools of Wearable technology helps in developing quality education through collaboration of module of better learning and teaching techniques.

RESEARCH METHODOLOGY

Research Methodology introduces overall research design of the study which includes the methodology adopted for carrying out the research study and various phases of this research. This study has been conducted with prime objective of identifying the role of quality education in facilitating smart growth.

Research Design

In order to satisfy the objectives of the research, the study employs both exploratory and descriptive research design. Exploratory research design has been used to generate basic knowledge on importance of education and for analysing the academicians; descriptive research design has been used.

DATA COLLECTION
Primary Data: Questionnaire Method (semi - structured questionnaire)

Secondary Data

- Official publications of Central and local governments, Census Board of India, Statistical Abstract of India, Indian Foreign Statistics, Economic Survey
- Official publications of semi government statistical organization
- Report submitted to economists, re-search scholars, universities and various educational and research institutions.
- Newspaper and Periodicals
- Website Links

Sampling
To understand the impact of quality education facilitating through wearable technology, 30 academics of higher education were surveyed through convenience sampling.

DATA INTERPRETATION AND ANALYSIS OF DATA THROUGH QUESTIONNAIRE
Interpretation through questionnaire to understand parameters of Quality education through Technology

Through the questionnaire

1. **96%** of the respondents are technological sound as they are users of Personal desktop computer, Personal Laptop computer, Personal digital assistant (PDA), Smart phone and Cell or digital phone.
2. The respondents are awareness of use of technology and their usage can be summarized as follows

Activities	Time spent by respondents
Classroom activities	**95%** time spent
Playing computer games	**76%** time spent
Downloading or listening to music	**86%** time spent
Chatting with friends or acquaintance using messaging	**92%** time spent
Online shopping	**70%** time spent
Surfing the internet	**90%** time spent

3. Skill level and computer application knowledge of the respondents can be summarized as follows
   a) **98%** respondents are skilled in the use of email
   b) **92%** are very skilled in the use of web surfing
   c) **90%** are skilled in the use of word processing
   d) **86%** are skilled in the use of PowerPoint presentation
   e) **76%** are skilled in the use of Excel
   f) **45%** are skilled in the use of Graphic designing
   g) **30%** are skilled in the use of computer software and online library resources.
4. **86%** of the respondents prefer mix of Technology and face to face teaching technique
5. **96%** of the respondents strongly agree that technology helps in enhancing the interest of the student towards subject , improves presentation of work, students score better grades, skill upgradation among students, quality learning etc.
6. **95%** of the respondents agree that technology can help in creating quality education as it creates more opportunities to collaborate with students across, shifts the paradigm of learning towards students, leads to experiential and interactive learning, increases the opportunity to access and use information, helps in getting a deep acquaintance with the subject knowledge, creates understanding of skills and talents of students.
7. **97%** of the respondents agree that change in the existing reforms of educational governance in implementation of technology help in achieving quality education.
8. All the respondents believe that technology help in achieving Quality education.

RECOMMENDATION THROUGH USE OF WEARABLE TECHNOLOGY IN EDUCATION

1. Wearable technology in education can increase a child's ability to more naturally interact with their environment and to be creative and innovative and students can more easily access information without any obstructions.
2. When it comes to collaboration amongst students and teacher-student communications, wearable technologies is very powerful tools. Their applications to both traditional classroom environments and virtual/distance settings have been well documented.
3. Compared to some of the most recent innovations in technology in education (i.e. tablets, Massive Open Online Courses [MOOCS], etc.), wearable technologies have the potential to engage students in ways previously not possible. For example, wearable cameras like Google Glass (and other technologies) can enable students to not only create first-person videos but also engage in unique point-of-view experiences. Autographer allows students to capture student's direct notes to ensure complete note taking. Muse tracks students' brain activity onto a smartphone or tablet so that it can detect what activities they might need to keep them focused on studying. Virtual Reality gives students hands-on experience that allows students to interact with the object in that particular environment. GoPro is a camera that can capture a student or teacher's point of view of events, such as a lesson or student behaviour. Google Glass enables students and teachers to search, take a picture, record video, and answer and translate questions in a foreign language.
4. The cost of the most wearable technology is currently prohibitively high.
5. Wearable Technology has recently inspired debates on technology's role in education, which is in itself beneficial. With other potentially useful technologies, such as tablets or smartphones, there is needed to make sure that education makes the most of them as soon as they're widely available.
6. As of now technology of wearable is nascent and in earlier adaptors so with time it can be rapidly used to enhance skill and quality development of education through learning and teaching through wearable technology.

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SMART HEADGEAR: EMBARK ON A JOURNEY TOWARDS SAFETY

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ABSTRACT
This paper deals with the various technologies used to ensure the wearing of protective Headgear by the Two Wheeler Rider throughout the ride. The number of casualties due to road accidents is increasing day by day. Among this number the percentage of accidents for Two Wheelers is observed to be the highest. As per the Motor Vehicle Act 1988, wearing protective Headgear is made compulsory for Two Wheeler Riders to reduce the risk of head injuries. A simple Sensor-Actuator Embedded System can be used to ensure the effective implementation of this Act. In this paper, a system is proposed to not allow a Two Wheeler to start without presence of Head within the Headgear even if the key is inserted for the ignition.

Keywords: Headgear, Act, Sensors, RFID, Ultrasonic, Policy, Ignition.

1. INTRODUCTION
1.1 Background
In this world of competition everyone is in a hurry to reach their destination. According to Statistical Year Book of India, two wheelers are the most sold vehicles throughout India. The reasons are- Affordability, fuel efficiency, low maintenance cost, burden on public transport due to population explosion and traffic issues. So people find Two Wheeler as the best option to commute in urban as well as in rural areas. Plus the craze of Two Wheelers among youngsters is growing rapidly, resulting into increased number of Two Wheelers on the road. The diagram below shows the statistics of Two Wheelers sales in India over last 8 years [14].

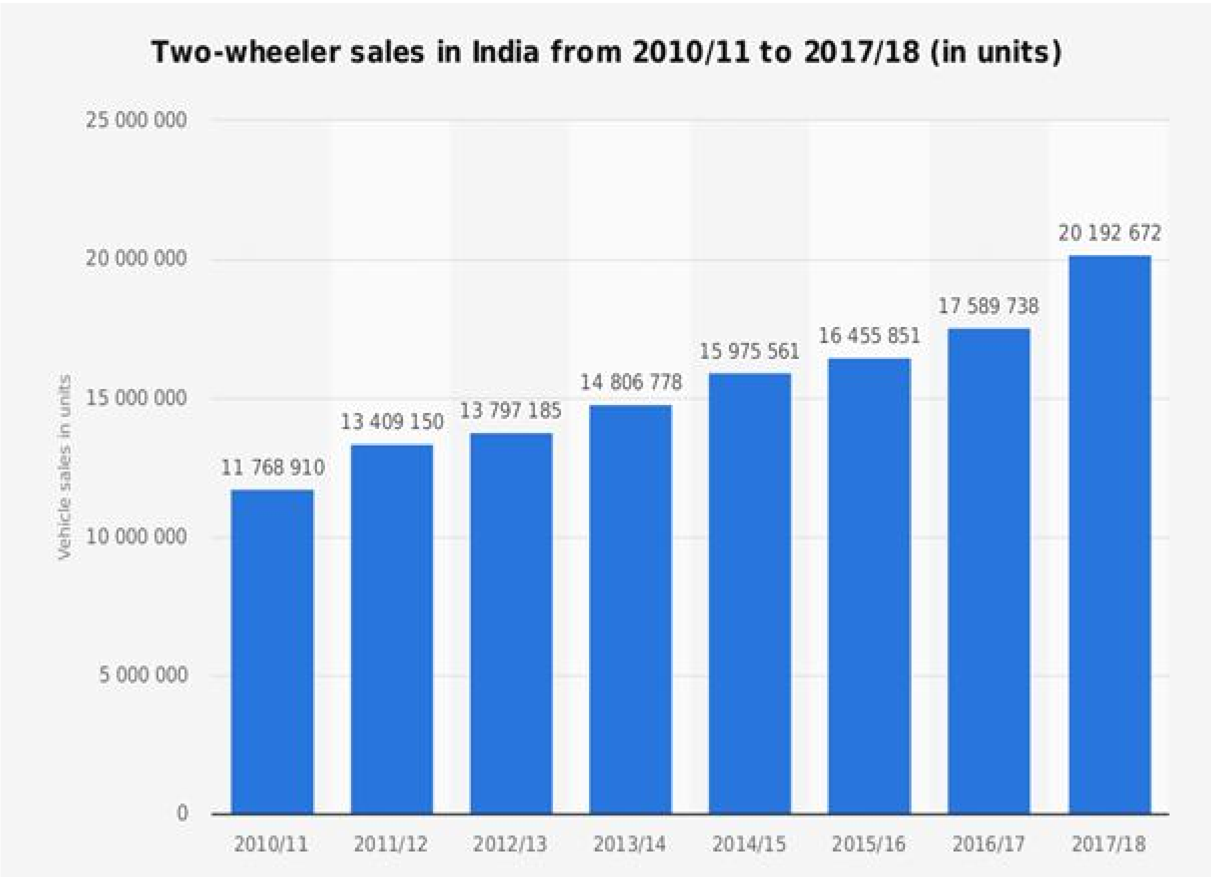

Fig-1: Two Wheeler Sales in India over last 8 years

As a result of growth of the number of two wheelers, the safety factor also arises. A lot of accidents are happening every day on the roads. There were nine road accidents that killed three people every 10 minutes in 2015, according to new national data, an increase of 9% over four years. Two-wheeler accidents accounted for 29% of all fatal road accidents in 2015, claiming 45,540 lives, followed by trucks (19%), which killed 28,910 people, and cars (12%), which killed 18,506 people [12]. The statistics below clearly shows that the mortality rate of Two Wheelers accidents is the highest.

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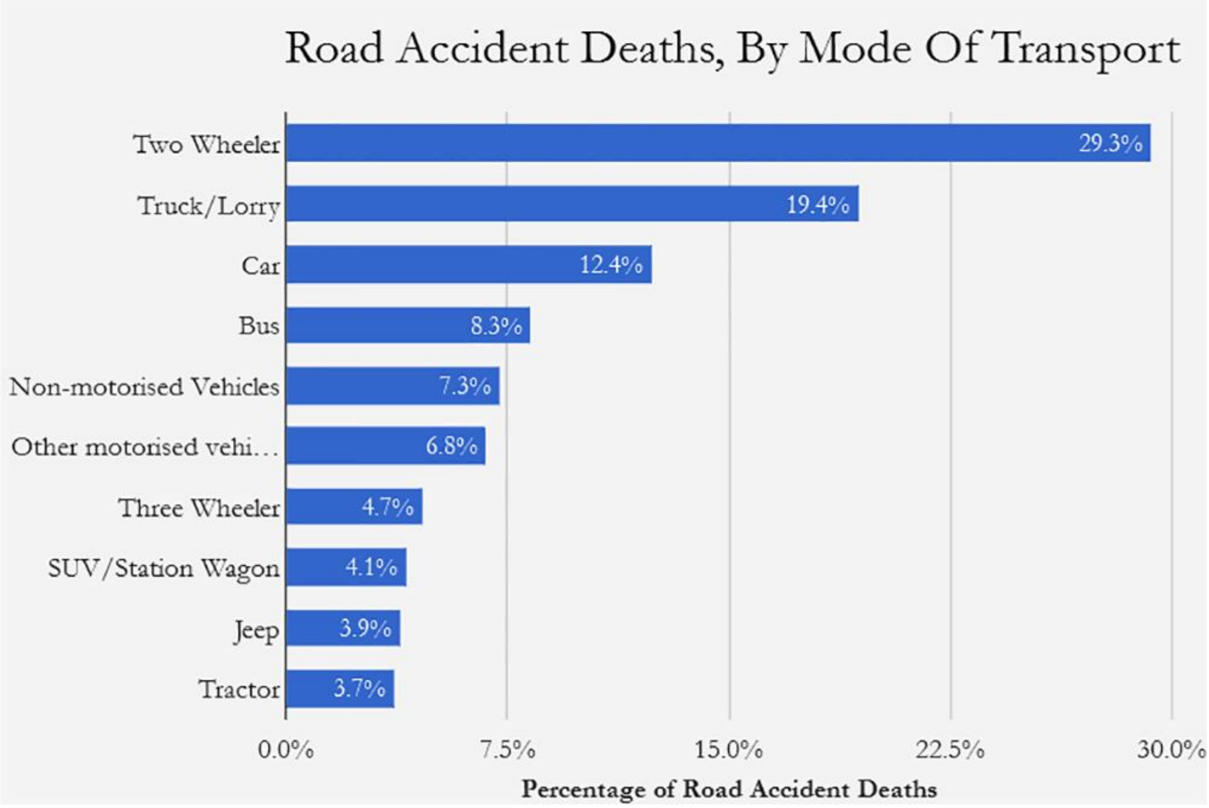

Fig-2: Statistics of Deaths by Road Accidents

There are certain causes which are responsible for it such as bad road, over speeding, slippery roads due to rains or oil spilling. The most severe case of all the casualties by road accidents is head injury. The head injury may result into paralysis and sometimes spot death. Wearing a helmet can reduce shock from the impact and may save a life.

1.2 Indian Government Policy About Wearing Helmets-

Motor Vehicle Act 1988 Section 129-

As per the Motor Vehicle Act 1988 section 129[1], every person driving or riding Two Wheeler shall wear protective headgear i.e. Helmet conforming to the standards of Bureau of Indian Standards.

Explanation – “Protective Headgear” means a helmet which, -

a. By virtue of its shape, material and construction, affordable to the person riding a two wheeler, a degree of protection from injury in case any accident happens; and

b. Is securely fastened to the head of the two wheeler rider by means of straps provided on the headgear.

Implementation Policy of the Headgear Act –

The wearing of helmet is mandated by the Law, which is the Motor Vehicles Act of 1988. At times the Courts have also directed the State or the Central Government to enforce the Helmet rule, or fortify the same, with the intention to reduce fatalities in road accidents. In Case of violation of this law, Government of India has declared Rs. 100 penalty for first time offense and Rs. 300 penalty for second or subsequent offense.

Even after the declaration of this law, only 50% of Two Wheeler riders wear helmet, according to the survey conducted by Government of India. The reason of this is - opposition by people, increased traffic load making it difficult to track down people violating the law, limited number of traffic police, etc.

This paper deals with the few techniques which can be incorporated in future to make the implementation of the Helmet Act more efficient. That in turn will reduce the load on traffic police and help them in making the road traffic more organised.

2. PROPOSED SYSTEM

The basic key here is to first check if the rider has actually worn the helmet, in other words the availability of the rider’s head inside the helmet. Unless and until Two Wheeler rider wears a headgear and then inserts the key, vehicle will not get ignition. Also if the rider removes the Headgear during the ride, the ignition will stop automatically.

Leading Helmet manufactures are adding innovative technologies like microphone, MP3 player, Bluetooth connectivity, wireless phone, flash light on top of it, etc [10]. These features are making the Helmet fancy but again the safety of bike rider is still a question. The Intelligent Headgear makes it compulsory to wear it while riding a motorbike as the rider cannot run a Two Wheeler without wearing a helmet. Plus few additional safety features can be added such that GPS module to detect location of vehicle, Accident Detection System, GSM MODEM, speed limit control system, etc.

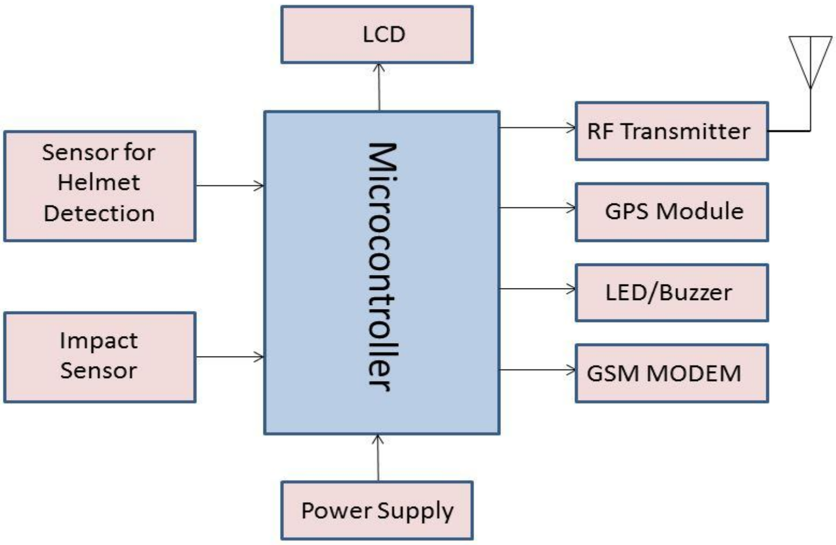

Fig-3: Block Diagram of Head-Gear Unit

The system works in two phases and communication between the phases is carried out using wireless technology. Phase I is designed to detect whether rider has worn Headgear or not. If Headgear is detected, the communication link will be set up between phase I and phase II and the signal is sent to the ignition system to start the vehicle. If rider is not wearing a helmet, ignition system will not receive activation signal and as a result vehicle cannot start.

2.1 Phase I- Detecting a Presence of Helmet-

For this purpose, various technologies are proposed in different papers.

1. **Pressure Sensing-** FSR Sensor (Force Sensing Resistor) is used for this purpose. The FSR contains polymer sheet as sensing film which contains electrically conducting and non-conducting particles.

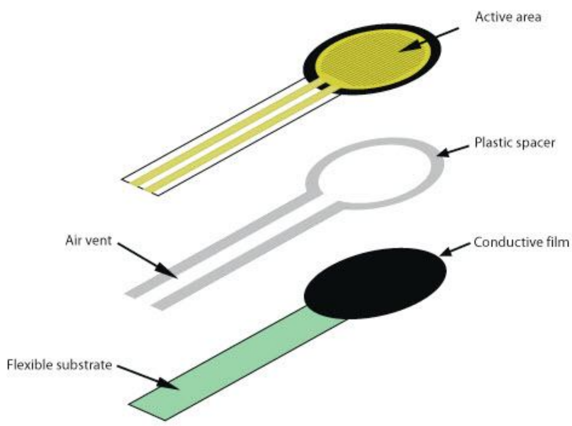

Fig-4: FSR Sensor

The sensor is mounted inside helmet. When a person wears helmet, the sensing film gets pressed against head of human which detects pressure/force and the particles touch the conducting electrodes and as a result resistance of the film varies. Change in resistance indicates presence of head within the helmet and communication link is set up between Phase I and II, which in turn gives ignition signal to the vehicle.

2. **Ultrasonic sensor or proximity sensor-** Ultrasonic sensors are used to detect presence of Head within the helmet. The sensor fixed within the helmet emits sound waves at a frequency, then receives echo signal from the object (Head) within the proximity and then calculates distance based on the time required.

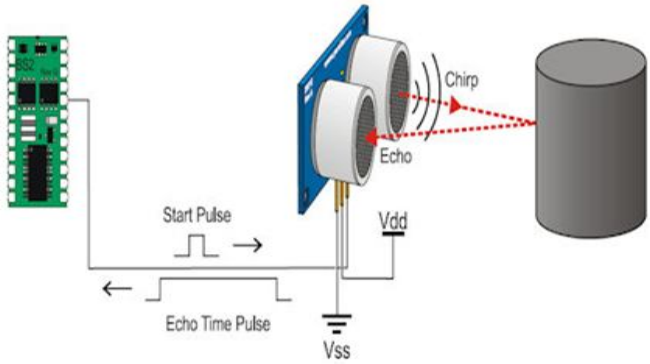

Fig-5 Ultrasonic Sensor

Presence of Headgear is detected if the calculated distance is less than or equal to the limit set.

3. **Flex Sensor-** It is variable resistor whose terminal resistance changes when the sensor is bent. It is usually 2.2 inches in length. It is fitted inside the helmet. As a person wears helmet, Flex sensor bents in particular angle. So sensor resistance increases depends on surface linearity.

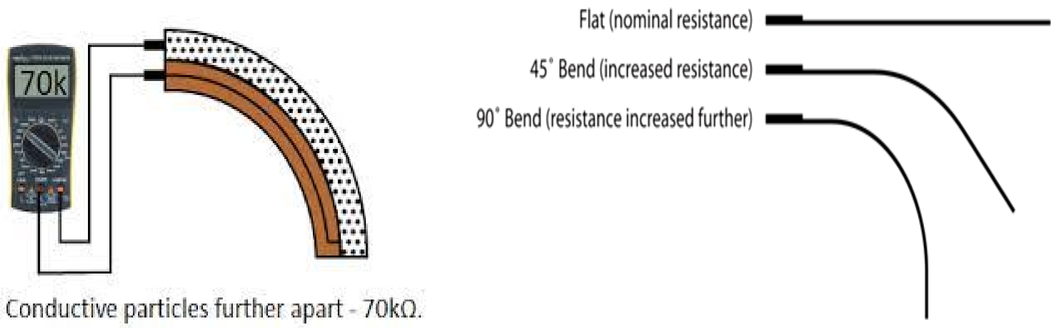

Fig-6: Flex Sensor

When flex sensor is linear, it will have nominal resistance. The resistance increases to twice when it is bent in 45º angle and it becomes quadruple when the bent is 90º. The change in resistance changes the current flow, which indicates presence of Head within the Helmet.

4. **Limit Switch-** A limit switch is an electromechanical device which can be placed inside Headgear. It consists of an actuator mechanically linked to a set of contacts.

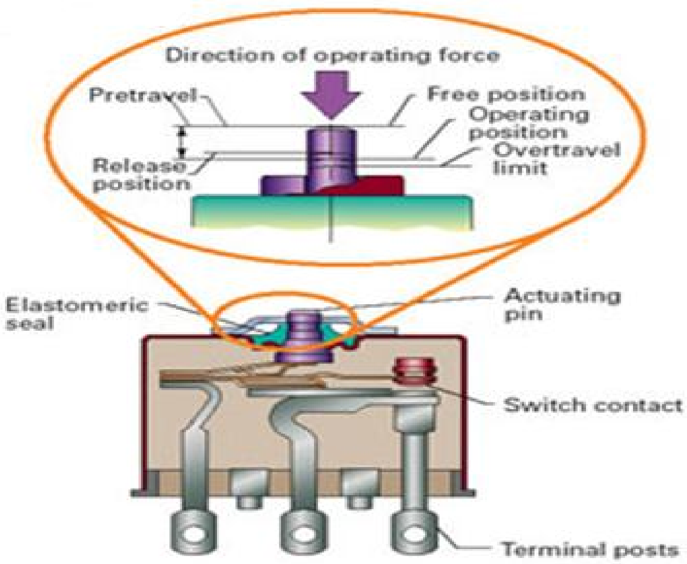

Fig.-7: Limit Switch

When an object (Head of rider) comes in contact with the actuator, the device operates the contacts to make an electrical connection to the ignition system. When an object is removed, the electrical connection brakes and which in turns stops the ignition.

2.2 Phase II- Ignition Control System

When a rider wears Helmet, its presence is detected by the sensor and signal is sent to the ignition control system. To set up a communication link between Phase I and Phase II, RF Trans-receiver is used. Transmitter unit will be fixed in Helmet and receiver unit will reside in vehicle. The output of sensor detecting the presence of Head within the Helmet is sent to RF transmitter and data will be transmitted. The receiver unit receives signal from transmitter. It consists of a RF receiver, relay and a power signal as shown in diagram below.

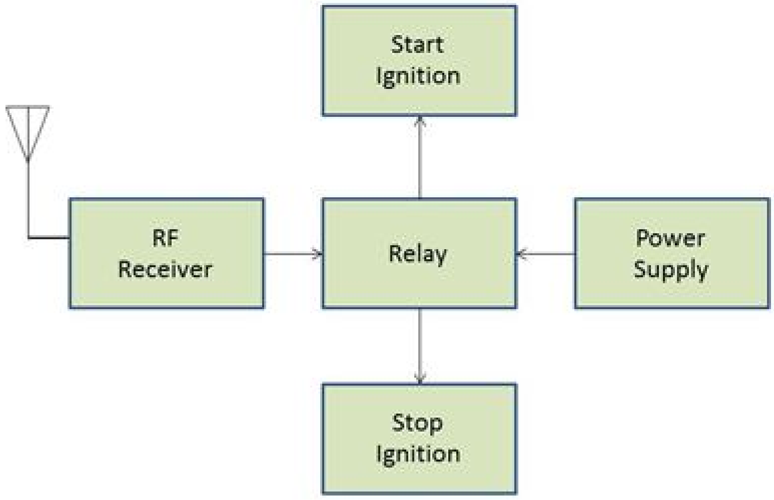

Fig-8: Block Diagram of Ignition System Unit in Two Wheeler

If the communication link is not set up, vehicle cannot start and message will be displayed on the screen and LED/Buzzer will be turned on. The ignition would be switched on only when the rider is wearing a Headgear.

8. ADDITIONAL SAFETY FEATURES

Accident Detection System- Impact sensor or Piezoelectric Sensor can be fitted in helmet to sense the crash. The location of the accident can be detected by GPS module and trough the GSM MODEM message can be sent to nearby hospitals and Emergency services[5][11].

Alcohol Detection System- This safety feature can be added to stop the riders who are drunk, from starting the vehicle by using Alcohol Detector Sensor[13]. It senses the breath of the rider. If alcohol breath is detected, the ignition system cannot turn on.

RFID Security System- Riders tend to take the helmet with them while they park their Two Wheeler. This feature can be implemented by using RFID detection system[10][3]. This will ensure that the engine of the Two Wheeler will start only when the helmet having the RFID transmitter is in its vicinity. This will help to stop the thefts of Two Wheelers.

4. CONCLUSION

Two wheeler vehicles account for 25% of total road crash deaths. Lot of lives can be saved if a model proposed in this paper is adopted. If Two Wheeler Manufacturer Companies and Helmet Manufactures agree to implement these technologies, it will have a huge impact on social level. This project will also be helpful For Indian Government for efficient implementation of Headgear Act, as no two wheelers can start the ride without Helmet. With some additional safety features such as Accident Detection System, Alcohol Detection System, Anti-theft mechanism, Bluetooth Connectivity, Flashlight on top, etc this Headgear will be a the first step to the journey towards Safe Ride.

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A STUDY ON DESTRUCTIVE ENVIRONMENT IMPACTS ON GREEN COMPUTING

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ABSTRACT

Green Computing alludes to the act of utilizing processing assets all the more productively while keeping up or expanding generally speaking execution. Manageable IT administrations require the incorporation of green computing practices, for example, control the executives, visualization, enhancing cooling innovation, reusing, electronic waste transfer, and streamlining of the IT foundation to meet manageability necessities. Later considers have demonstrated that expenses of intensity used by IT divisions can approach half of the general vitality costs for an association. While there is a desire that green IT should bring down expenses and the company's effect on nature, there has been far less consideration coordinated at comprehension the vital advantages of economical IT benefits as far as the making of client esteem, business esteem and societal esteem. There are poisonous synthetic concoctions utilized in the assembling of PCs and when we utilize casual arranging they put hurtful effects on our condition. So to spare our environment and to diminish the unsafe effects of PCs we need to mindful about it. Green processing can additionally create arrangements that offer advantages by adjusting all IT procedures and practices with the centre standards of maintainability, which are to lessen, reuse, and reuse. The idea of Green registering has started to spread before hardly any years, increasing expanding ubiquity. This examination paper depicts that today PC is a fundamental piece of our life, nobody can not to do any work without PC, but rather we have to know about the destructive impacts of PC on our environment.

Keywords: Green Computing, Reusing, Unsafe, Energy Consumption, Country Security.

9. INTRODUCTION

Green processing is the examination and routine with regards to limiting the ecological effect of PC framework and related assets viably and eco-accommodating. It is a rising idea towards lessening the perilous material and spare our environment from the unsafe effects of the PC, CPU, servers and other electronic gadgets.

Green Computing is fundamentally worried about the PCs when they are fabricated, utilized and arranged with no side impact on environment. Utilization of PC assumes an essential job in our environment contamination. In this time 70 percent of vitality is devoured by our PCs which are not in appropriately utilized is as yet turned on and that devoured vitality is fundamental reason of co2 emanation. So now there is a major need to spare our environment and carry on with a sound life. In 1991 the Environmental Protection Agency (EPA) acquainted the Green Lights program with advance vitality proficient lighting. This was trailed by the Vitality STAR program in 1992, which set up energy efficiency determinations for PCs and screens [13, 24]. Nonetheless, it is in the most recent decade where green figuring has picked up footing. The fast development of Web based business figuring, regularly figuratively alluded to as "cloud" figuring, and the expenses of vitality to run the IT framework are the key drivers of green figuring. Over the most recent quite a while the connection between vitality use and carbon age and the craving to reduce the two has offered ascend to the green processing mark. Significantly expanded vitality utilize driven by the fast development of server farms has expanded IT costs, and the coming about ecological effect of IT, higher than ever. Undertaking server farms can without much of a stretch record for than 50 percent of an organization's vitality bill and roughly 50% of the corporate carbon impression [15, 17]. In the U.S., the power utilization costs for server farm processing and cooling multiplied from 2000 to 2006 to $4.5 billion. It expected to twofold again by 20011 [18]. Despite the fact that vitality use and its related expense has been the key driver for green registering, a developing energy about the dangers of environmental change and expanding worries about vitality security have raised green figuring to a national and worldwide issue. Notwithstanding corporate personal circumstance, government controls will progressively drive the reception

1. GREEN COMPUTING

Green computing is an application of environmental science which offers economically possible solutions that conserve natural environment and its resources. Green computing is designing, manufacturing, using and disposing of computers and its resources efficiently with minimal or no impact on environment. The goals of Green computing are to manage the power and energy efficiency, choice of eco-friendly hardware and software, and recycling the material to increase the product’s life. Go for Green computer reduced your electricity bill and give a full rest to your mind. Now in these days, we use the star management strategies and technologies that reduce energy consumption waste.

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2. THE FIRST WAVE

Since its inception, the IT industry has focused on the development and deployment of IT equipment and services that was capable of meeting the ever-growing demands of business customers. Therefore, the emphasis has been on processing power and systems spending. Less attention was afforded to infrastructure issues which include energy consumption, cooling, and space for data centres, since they were assumed to be always available and affordable. Over the last decade these issues have become limiting factors in determining the feasibility of deploying new IT systems, while processing power is widely available and affordable [21]. Investment in data centres, including the energy cost for running and cooling them, is a major consideration for IT managers. A large enterprise data centre cost from $500M to $1B, a three-fold increase since 2003 [15]. Data centres typically account for 25% of total corporate IT budgets and their costs are expected to continue to increase as the number of servers rise and the cost of electricity increases faster than revenues. One study indicated that the cost of running data.

3. FACTORS DRIVING THE ADOPTION OF GREEN COMPUTING

The following patterns are affecting server farms, and to a lesser degree, work stations, and driving the reception of green computing:

3.1 The fast development of the Web

The expanding dependence on electronic information is driving the fast development in the size and number of server farms. This development results from the quick reception of Web correspondences and media, the computerization of business procedures and applications, lawful prerequisites for maintenance of records, and catastrophe recuperation. Web utilization is developing at in excess of 10 percent every year prompting an expected 20% CAGR in server farm request [24]. Video and music downloads, on-line gaming, informal organizations, online business, what's more, VoIP are key drivers. Also, business utilization of the Web has increase. Businesses, for example, budgetary administrations (speculation, managing an account, and protection), land, human services, retailing, assembling, and transportation are utilizing data innovation for key business capacities [2]. The approach of the Sarbanes-Oxley Act with its prerequisite to hold electronic records has expanded capacity request in a few ventures at 50 percent CAGR [22]. Debacle recuperation procedures that order copy records expand request further. At long last, numerous bureaucratic, state, and neighbourhood government organizations have received e-government systems that use the Web for open data, announcing, exchanges, country security, and logical processing

3.2 Increasing equipment power density

In spite of the fact that progresses in server CPUs have at times empowered higher execution with less power utilization per CPU, generally server control utilization has proceeded to increment as more servers are introduced with higher execution control hungry processors with more memory limit [19, 21]. As more servers are introduced they require more floor space. To pack more servers in a similar impression the shape factor of servers has turned out to be a lot littler, in a few cases contracting by over 70% using edge servers. This expansion in bundling thickness has been coordinated by a noteworthy increment in the power thickness of server farms. Thickness has expanded in excess of multiple times from 300 watts for every square foot in 1996 to more than 4,000 watts for every square foot in 2007, a pattern that is relied upon to proceed with its upward winding [13, 19, 20, 21].

4. SUSTAINABLE IT SERVICES: THE SECOND WAVE

Sustainable IT services are essential to business success. There is increasing pressure to adopt sustainable business practices. Sustainable IT services are not only about the first wave green computing focus on Data-Centre efficiency or how to minimize carbon footprints. It is squarely focused on the long-term importance of IT to the organization, its customers and to society at large—all second-wave sustainability issues. Therefore, sustainable IT is about everything an organization needs to do to ensure that IT services delivers superior value to attain a strong market position and to ensure its ability to survive. It is about aligning IT with business strategy to achieve market-leading business value, customer value and societal value. This will ensure the viability of the IT organization itself. There are several elements that comprise sustainable IT services [7].

Service sustainability: At a minimum, this includes effective and reliable processes for delivering IT services. It is about managing performance and doing what is necessary to keep the service running smoothly such as constant security, systems recovery planning, and keeping versions current [7]. Temporal sustainability: To sustain IT services over time an organization has to start with a clear understanding of the value that is to be created. It must have a strong business case, be responsive to business conditions, and create value for the customer and society, as well as the business [7].

Cost sustainability. This includes acquisition and operating costs such as the choice of low cost hardware and software that also offer benefits such as low power consumption and ensure high levels of resource utilization. Life cycle management and replacement costs are also important consideration [7, 11, 22].Organizational sustainability. Organizational change is inevitable. Whether it derives from personnel changes or major changes in technology, markets, or mergers and acquisitions, IT services must continue to operate and innovate. Well managed systems with good documentation and training are more able to manage change [7].

Environmental sustainability. In an ecological context, IT services must be able deliver customer and business value while ensuring that the Earth's resources are being used at a rate that ensures replenishment. In essence, the goal for environmental sustainability is for IT services to be able to meet the needs of the present without compromising the ability of future generations to meet their needs [19]. While energy efficiency is the principal driver of green computing, environmental reporting standards will be the primary driver of sustainable IT services.

5. CONCLUSION

Sustainable IT has been a major focus for IT governance for the past decade as the cost of powerfulness for data kernel has risen rapidly. The focus of the first wave of sustainable IT go-ahead has been on strategies to increase data heart efficiency. Therefore, substructure, power and workload direction, thermal management, product design, virtualization, and cloud computing strategies have assumed primacy in terms of both strategic and tactical focus. The second wave of sustainable IT Robert William Service is nascent and much more difficult to define and implement. It involves defining the office of the IT formation in an go-ahead 's overall CSR strategy . It will involve establishing a roadmap and baseline metrics, redesigning commercial enterprise concern processes, encouraging participation , and adapting the organization's finish to new ways of doing 12 senses of thing [23]. IT governance and determination making will likely be substantially impingement ed. This paper offered a revaluation of current thinking and suggested broker that should be considered for a sustainable IT strategy. Future research should address the family relationship between customer value, business value, and societal value and how sustainable IT strategy will impact each. It would seem that these concepts should be mutually supportive. However, many business professional view them to be at odds with each other, or at least to involve trade-offs that may not always be beneficial for the company. More research is needed to fully understand the marketplace impact of a sustainable IT serve strategy. Beyond cost savings are there benefit from sustainability oriented business strategies that customer are willing to pay for? Does sustainability for IT avail create competitive advantage? Finally, a model for the development and implementation of sustainable IT services needs to be developed. This model will likely involve the integration of the IT organization's sustainability enterprising ness with the enterprise-layer model and throughout the corporate ecosystem.

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Track – 4

PG AND GENERAL

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HOME AUTOMATION SYSTEM USING RASPBERRY PI

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ABSTRACT
The paper presents a low cost and flexible home control and monitoring system using an embedded microprocessor and microcontroller, with IP connectivity for accessing and controlling devices and appliances remotely using Smart phone application. The proposed system does not require a dedicated server PC with respect to similar systems and offers a novel communication protocol to monitor and control the home environment with more than just the switching functionality. To demonstrate the feasibility and effectiveness of this system, devices such as light switches, power plug, temperature sensor and current sensor can be integrated with the home control system.

Keywords: Raspberry Pi, Relays, Sensor, Detectors, Python; Android

1. INTRODUCTION

The Internet of Things can be described as connecting everyday objects like smart-phones, Internet TVs, sensors and actuators to the Internet where the devices are intelligently linked together enabling new forms of communication people, and between things themselves.

Home automation System can be described as introduction of technology within the home environment to provide convenience, comfort, security and energy efficiency to its occupants. The home automation system is an android web-based application. This paper can be customized a lot as it has multiple GPIO port that can be programmed and they can give the user control over security, lighting, energy management, access control, entertainment. [1] Home automation system also provides a user-friendly interface on the host side, so that devices can be easily setup, monitored and controlled.

The reason to develop this system is to save time and man power along with security and convenience. Home automation refers to the application of computer and information technology for control of home appliances easily and reducing the power consumption or the power wastage associated with the manual system. [1] The application varies from a simple remote control of lighting to complex micro-controller based networks involving varying degrees of intelligence and automation.

2. OBJECTIVES

1. Android controlled System should be able to control the home appliances wirelessly with effectively and efficiently.
2. Secure Connection Channels between Application and Raspberry pi
3. To make the home appliances in control any device capable of Wi-Fi connectivity will able to control the home appliances from remote location.
4. Extensible platform for future enhancement of the System.
5. The application is to be highly extensible with adding features in the future as needed.
6. To implement a low cost and scalable home automation system.

2.1 Purpose

With home automation, you can carry out all day to day tasks using your smartphone. You can get complete remote home control from your smartphone as well as allowing you to switch on an individual light when you are away from home. Home automation allows you to activate a group of devices with a single touch; this not only gives you peace of mind but also helps keep your utility bills and monitor home security. [2] The form of home automation focuses on making it possible for older adults and people with disabilities to remain at home, safe and comfortable.

- To help people to monitor electrical appliance in their house.
- To develop Automated House by using Raspberry Pi.
- To explore the concept of using Raspberry Pi

2.2 Scope

The project aims at designing a prototype for controlling the home appliances that can be controlled wirelessly via an application that provides the features of switch mode.

An application is run on android device. The system can be used in wide range of areas.

- The system integrated with different features can be applied in the following fields.
- The system can be used in home, small offices to the big malls
- The system can be used from home to offices to control the electrical Appliances.
- The home/office appliances can be controlled in intra-network accessed via internet.

3.1 Problem Definition

When we are away from our house, whether on duty or having holiday, it is hard for us to monitor our house especially for the electrical appliance; light and fan. During festive holiday, we are advised not to switch on the light all the time.

So, in the following paper our aim is to build a fully workable and controllable home appliance on circuit switch board directly. The user interface would be created for desktops or laptops and applications for mobiles and tablets. [2] The additional new feature Telegram app will be used. Our system would also hold features to control the devices. A control would be provided to the members of the family with an administrative feature. Moreover, guest access and family parental control would also be implemented.

The Existing system has the drawback of not being able to program the devices and SMS depends on the networks and there is a possibility of delayed delivery. System does not does not have any state information related to the devices and expects the user to keep track of it also suffers from the drawback of the range of Bluetooth being around few meters only. In proposed project will work on the drawbacks.

3.2 Preliminary Product Description

The paper is sort of proof of concept that will demonstrate the possibility to remote control sensors and actuators (for example a couple of relays) via Telegram. Raspberry Pi is a credit card sized computer. It is a capable little computer which can be used in electronics projects, and for many of the things that desktop PC does. Raspberry Pi used in this research is the Raspberry PI 3 Model B. It is selected because the price is low, and the amount of community supports.

Telegram is an instant messaging application, like the famous WhatsApp. Last June, the Telegram developers **announced** that a new set of APIs were available to develop bots. The idea was to develop a bot, running on my Raspberry Pi, that receives commands via Telegram chats. The user, through the Telegram app installed on his smartphone, starts a chat with the “bot” account; the messages are delivered to the Telegram servers.

By using a python code based on the example from Telegram bot official website and paste the token access in the python code. Run the python code and send the message from the Telegram massagers. The bot will reply to your message based on what you have set at the python code.

In this project we are using Telegram bot’s API to send the message and command from my smartphone to the Pi to control the actuators of aquarium monitoring system such as light and feeder. The message that sent from Telegram app will pass through the Telegram server then to the custom Telegram bot that I installed in the Raspberry pi. So, this application is only working when the Raspberry Pi is online that is connected to internet.

The system is developed using the Raspberry Pi and Node MCU as the main components. The communication between Raspberry with Node MCU are using MQTT, while the communication between users and Raspberry using a Telegram bot. Other components used in the development of this prototype are sensors that consists of rain sensor, door sensor, passive infrared sensor (PIR), and DHT22 (temperature and humidity) sensor. The system has 3 modes which can be selected by the user; the modes are auto, manual, and secure. Auto mode works by detecting the presence of a human using a PIR sensor and a temperature sensor using DHT22. [3] If the PIR sensor detects human presence in the room, the sensor will transmit the readings to the Raspberry Pi results, then the Raspberry Pi will instruct the relay to turn on the lights that are in the room. DHT22 sensor is used to determine whether the air conditioning should also be turned on or not. Manual mode works by waiting for user commands given to the system via bot telegram. The secure mode is used when the user is not at home. When secure mode is active, PIR sensor and door sensors will work. [4]

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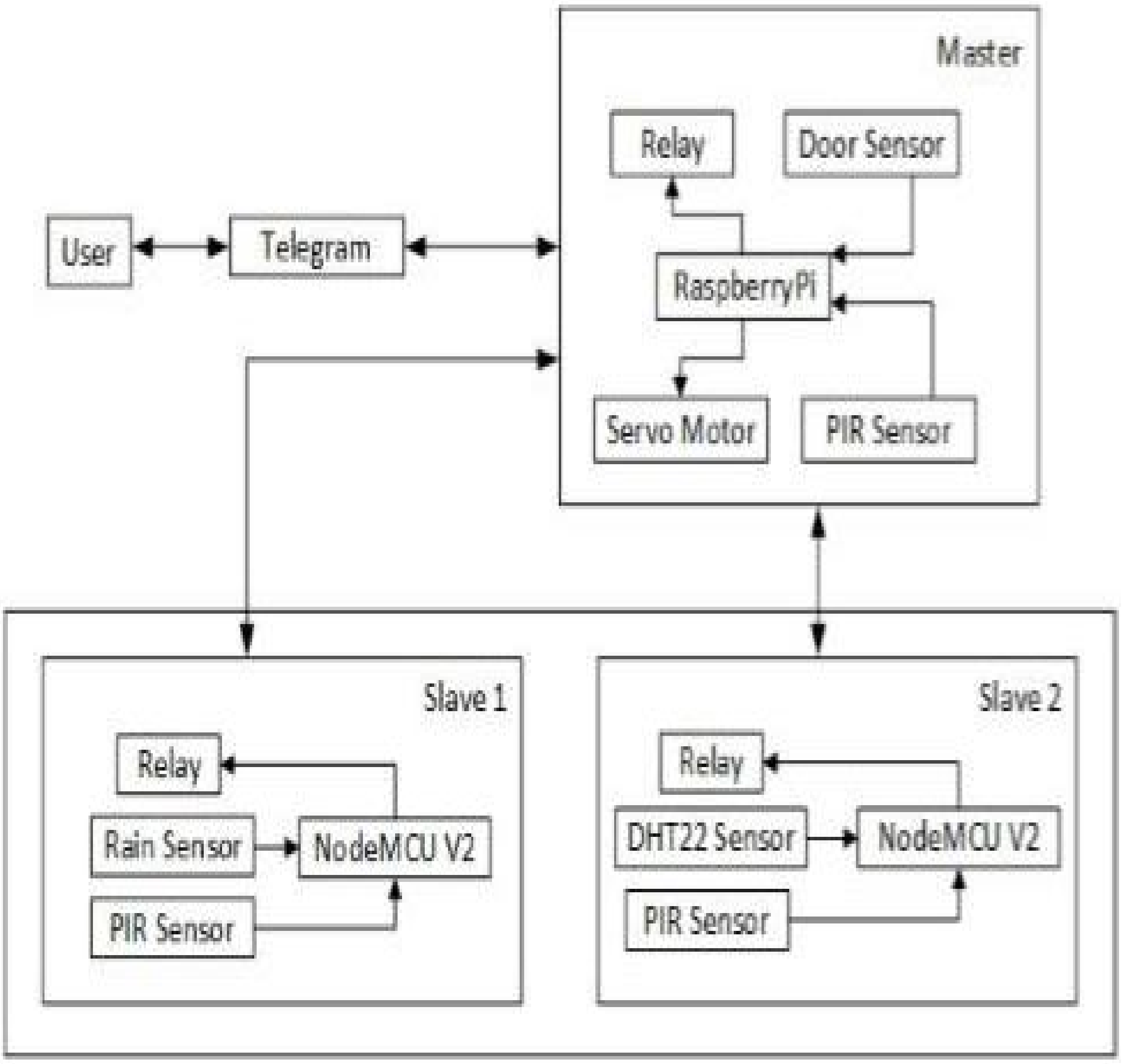

Fig-4.1

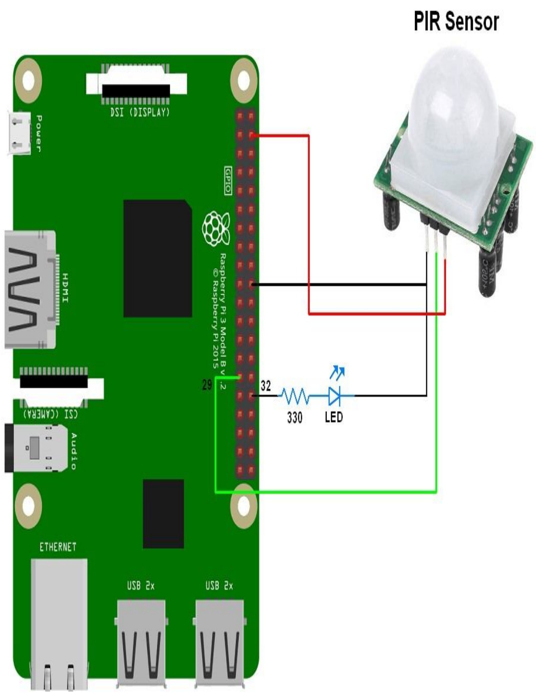

Fig-4.2: Raspberry Pi Interface with PIR sensor

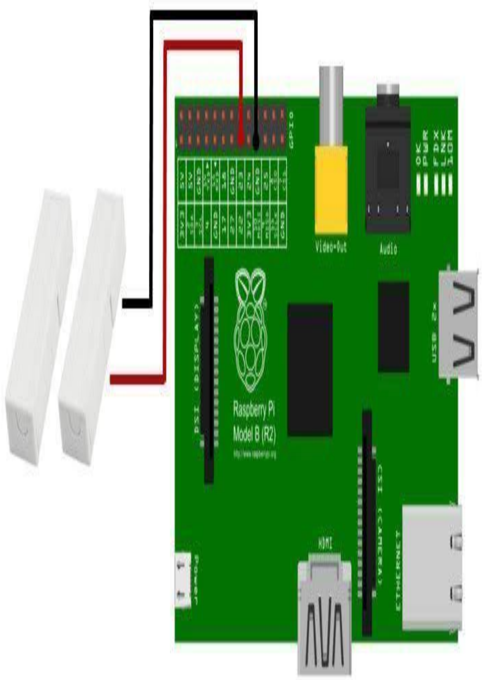

Fig-4.3: Interface with door sensor

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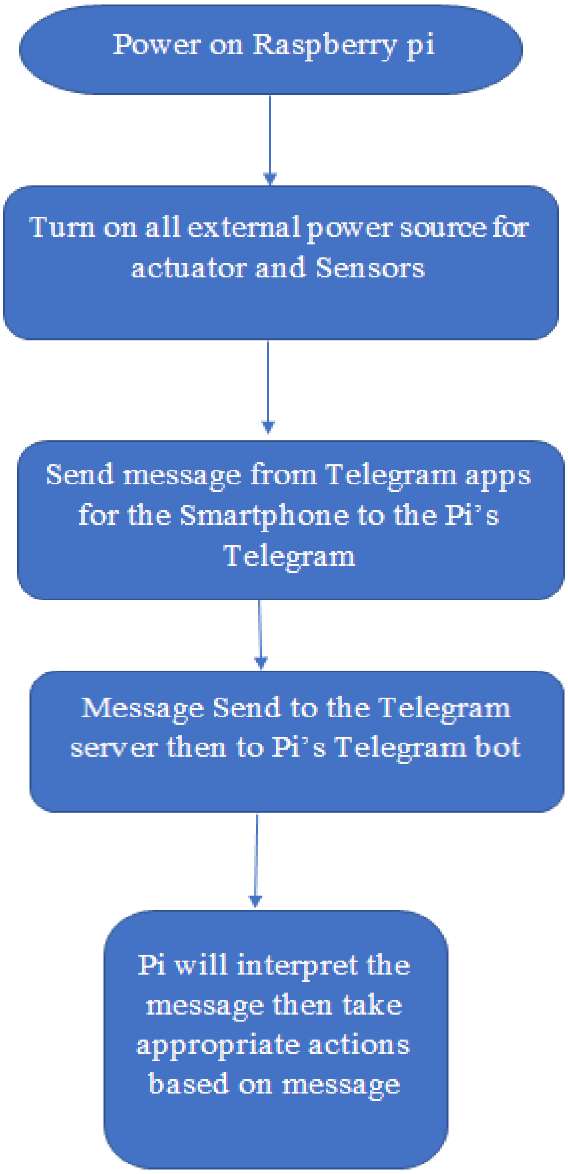
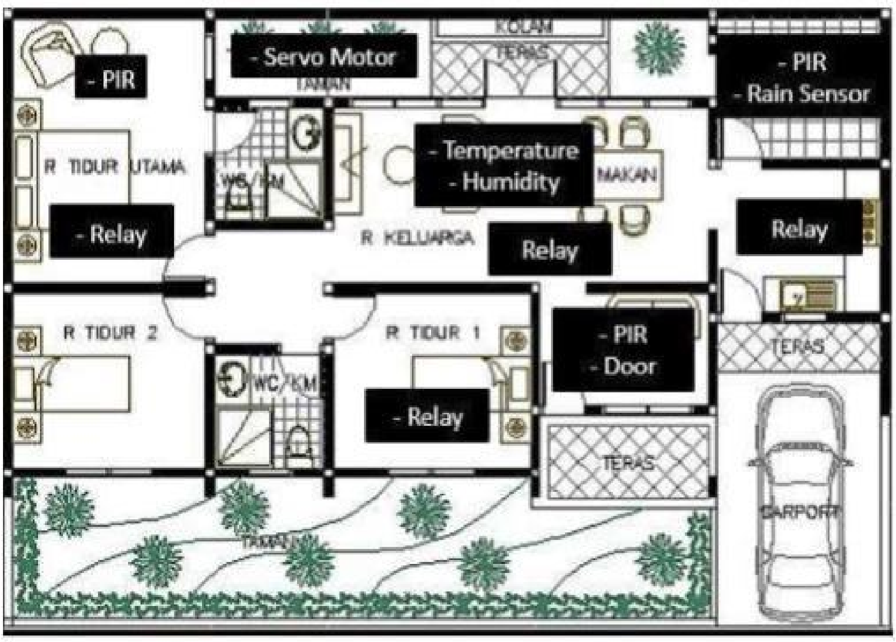
4.4 Flow Chart



User Interface Design



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RFID BASED TRAFFIC MANAGEMENT SYSTEM USING ARTIFICIAL NEURAL NETWORKS

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ABSTRACT
Intelligent real-time traffic control system is momentous for emerging cities. The use of RFID technology with Artificial Neural Networks (ANN) based algorithms will provide a decisive methodology for dealing with traffic management as well as traffic violators which will help overcome traffic congestion. System has been designed to cater the needs of traffic control system on internal roads, highways and toll gates in any hour of day, throughout the year. System architecture comprises of multiple RFID readers, with data processed by an ANN based algorithm, which will be placed facing the road. Predefined set of functions get triggered after receiving inputs to provide a responsive signalling and fine deduction system. The algorithm for the mechanism is explained in detail to get a felicitous result for the problem and make the system robust. The registered passive RFID tags, placed on vehicle, will store detailed information of the vehicle & its owner. These tags will correspond to a refillable virtual wallet for deducting fines. System will incorporate mechanism for tracking lost vehicles as well as monitoring vehicular movements with the help of system logs.

Keywords: UHF-RFID, E-challan, ANN

1. INTRODUCTION
The urbanization and population outburst are the major reasons for issues related to traffic management and road safety. Overpopulated cities like Mumbai are facing huge losses due to an incapable and obsolete traffic management system and fine collection techniques. Amelioration of traffic management techniques is a must because of manual generation of E-challan which makes it a ponderous task. So according to the proposed system, there will be a mechanism which will support real-time intelligent traffic control system using ANN based algorithms. These algorithms will be used for managing and controlling the traffic light and facilitate fine collection facilities with minimum human efforts required, in addition, it helps in monitoring & tracking the car activities. The readers which will be deployed on the traffic signals and on the street lights at fixed positions, as shown in *Fig. 1*, will detect the RFID card. The card processing takes place in two-phase, the first phase works with ANN based algorithms for processing the traffic light with calculating traffic density in the area. The second phase works with triggering functions which compare the value of signal i.e. red, yellow & green if the card is detected when the signal is red, the process for fine generation and collection will get provoked. The car & the owner details will be fetched from the database with respect to card number which is detected. Challan generation will be based on the type of offense which is committed. The fine collection will be done directly if the card has commensurate(adequate) balance. The deficient balance can be dealt with provision for direct deduction from a bank account. The project emphasizes the efficacious traffic lighting switching and automating the challan generation and fine collection mechanism in addition to reducing the government management and administration overheads. The successful implantation of the project depends on the support given by the government.

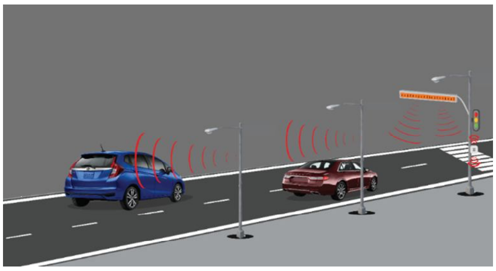

Fig-1: Proposed Architecture

2. STUDY
The study shows that there could be probable scenarios as mentioned below:

Scenario-1

Problem Statement: In the absence of traffic warden; traffic management on the roads with high traffic density during the peak hours becomes a problem. Here's how the problem occurs the comparative study of the adjacent roads is not taken into due consideration on that hour of the day.

Proposed Solution: To overcome this problem there could be multiple solutions, the one which is discussed in this paper is inspired from an Artificial Neural Networks based algorithms.

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Scenario-2
Problem Statement: If the commuter tries to jump the signal, violating traffic rules.

Proposed Solution: The use of passive RFID Tags placed on the car windshield will be detected by the Ultra High-Frequency RFID reader which are placed on the traffic signal. These Reader on detecting the tag will trigger functions defined for signal jumping supporting real-time challan generation and also a fine collection which is not possible in the currently existing system all the time.

Scenario-3
Problem Statement: In case of theft of a vehicle, tracking the vehicle becomes a problem.

Proposed Solution: Using the system logs, vehicular movement and location can be tracked and also the radius of the circle to find the vehicle gets smaller even if the tags are removed.

2.1 Comparative Study
RFID technology is proposed in many of the research work for automated fine detection on traffic rules violation and cameras for intelligent traffic light control system. These research works have focused and proposed the solution for each problem in different manner. The proposed system is been designed in order to provide solutions to both of the problems using single technology.

[1] *'Automated Penalty Collection for Traffic Signal Violation Using RFID'* a research paper by *Suyash Bharambe, Omkar Dixit, Sushant Wavhal, Sapna Golhar in International Journal of Engineering Science and Computing* [1] have defined a solution in order to cater problems of traffic violation and lane clearance of the emergency vehicle. The research work states that there must be RFID tags which distinguish emergency vehicle and non-emergency vehicle and these tags will be communicating with the signal in order of free flow emergency vehicle movement which may technically quite challenging as there must be some mechanism which needs to be created in order to deal with the vehicles not on the emergency mode and also there must be proper algorithm needs to be defined for vehicles coming in opposite direction. The application of RFID technology can further be used in a cogent manner by using ANN for traffic trend analysis which will be used for intelligent traffic light system.

[2] *'Neural Network based Vehicle Classification for Intelligent Traffic Control'* a research paper by *Saeid Fazli, Shahram Mohammadi, Morteza Rahmani in International Journal of Software Engineering & Applications* [2] have proposed a methodology which is used to identify vehicles in motion and after processing the inputs give an adaptive output. Implementation challenges which can be faced are, first the result may differ in night where the dim street lights make it caliginous recognizing vehicles will be difficult task, second is hardware robustness which can be an issue in rainy and stormy weather, third is how to tackle when some birds block the view of the camera and fourth is there is no mechanism to deal with traffic violators.

2.2 Architecture
The system incorporates a combination of hardware and software. Hardware architecture comprises of RFID tags & UHF-RFID reader module. RFID tags will be placed on car windshield as seen in the *Fig. 2* and for 2-wheelers where sticker may not be feasible due to weather conditions, there will be a provision of metallic tags which can be mounted on 2-wheelers. [3] Passive RFID tags, which are used, have no internal power supply and they signal by backscattering the carrier signal from the reader. This means that the antenna has to be designed to both collect powers from the incoming signal and to transmit the outbound backscatter signal [3].

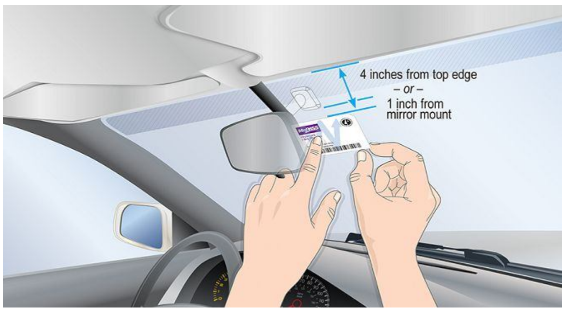

Fig-2: Applying RFID Tag

The Structural design is inspired from the architecture used by electronic toll road system in Dubai, Salik. Readers will be parallelly vertical to road, facing road and these readers will be connected along with the traffic signal to the processing unit which is connected to cloud server where all the processing will take place. Vehicle owners will get all the notifications via SMS & mail using the server as seen *Fig. 3*.

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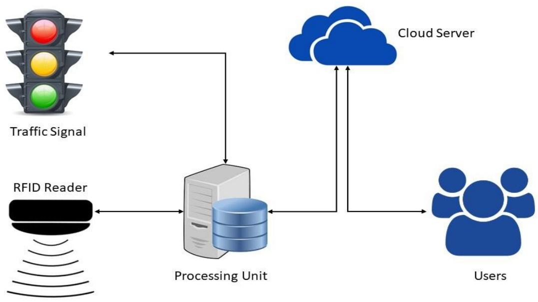

Fig-3: Processing Overview

3. ANALYSIS

In accordance with the analysis, there are various problems that are faced in the current traffic management system. The lack of an efficient system may cause a huge loss to people and also the government. From the first comparative study we detect a problem of defining an efficient way to deal with on-duty emergency vehicle and also for vehicles moving in the no entry section, for on-duty vehicles a mechanism needs to be designed where vehicles driver will get special cards which will be placed in a metallic casing, this will help in differentiating the vehicles from other vehicles. Solution to handle access of vehicles in no entry or in opposite direction is defined in the methodology section and binary logic in *Fig.* 4. Optimum utilization of RFID technology can be taken as the readers will use ANN algorithm for traffic balancing and binary logic for managing traffic violation in contradiction to the second comparative where cameras are used only for vehicle recognition which will face situational problems as said earlier. Implementing RFID technology will be an expensive investment and also have high complexity for its installation but the major benefits that it will serve as an efficient traffic management system which can effectively deal will traffic violation in any situation along with smart traffic light management for the entire city.

4. METHODOLOGY

The proposed system has kept in mind gap's in the existing system and trying to bridge them using a single efficient technology. RFID readers which are placed on every road and on the cross junction, on every road there will be three sets of reader one vertical above the zebra crossing and two set on the light poles at a certain interval. The first set of reader will be above the zebra crossing which will scan vehicular movement during and after the red signal. The primary motive of the signal is to detect traffic violations. One of the most challenging tasks is to detect signal jumping at the cross junction where there are 8 roads which need to be monitored and worked on simultaneously. Solution to this problem is shown in *Fig.* 4 where there is a binary logic created with the help of 3-bit value.

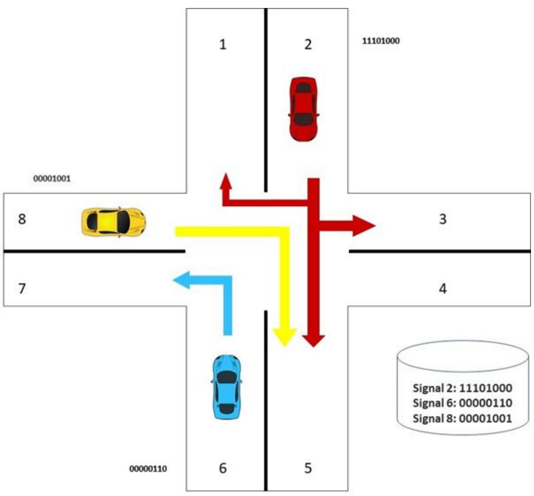

Fig-4: Binary Logic

Considering each road corresponding to a single binary number, a binary value of 1 represents authorized access to vehicle and 0 as unauthorized access. Each and every road will have its own 3-bit value stored in the database and regular updating will take place according to signalling status. The Fine deduction mechanism for signal jumping is explained in the *Fig.* 5 where real time transactions are supported i.e. real time challan generation and payment if adequate balancer present. The memory utilization is optimum as there is only 3 bytes which will be used for a single cross junction. The vehicular information such as insurance & PUC can also be stored and checked for timely renewal of both. [4] The problem of traffic signal control system for large traffic

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networks can be divided in subproblem, where each sub problem is handled by processing unit at sub junctions. For such distributed control system each processing unit will generate its own set of variables based on local information [4]. The reader will get initiated when the signal status is changed to red, reader one will calculate the number of vehicles within its proximity range. As a reader may read a vehicle tag multiple times, we choose to take the last read value of tag and decide in which area is the vehicle. Simultaneously all the reader which are placed at defined space interval, say 100 meters, will read all vehicles tag within their proximity. Here we are using a technique which is inspired from Warren McCulloch and Walter Pitts artificial neuron. After WWII, in year 1943, Warren McCulloch and Walter Pitts modelled artificial neuron to perform computation.

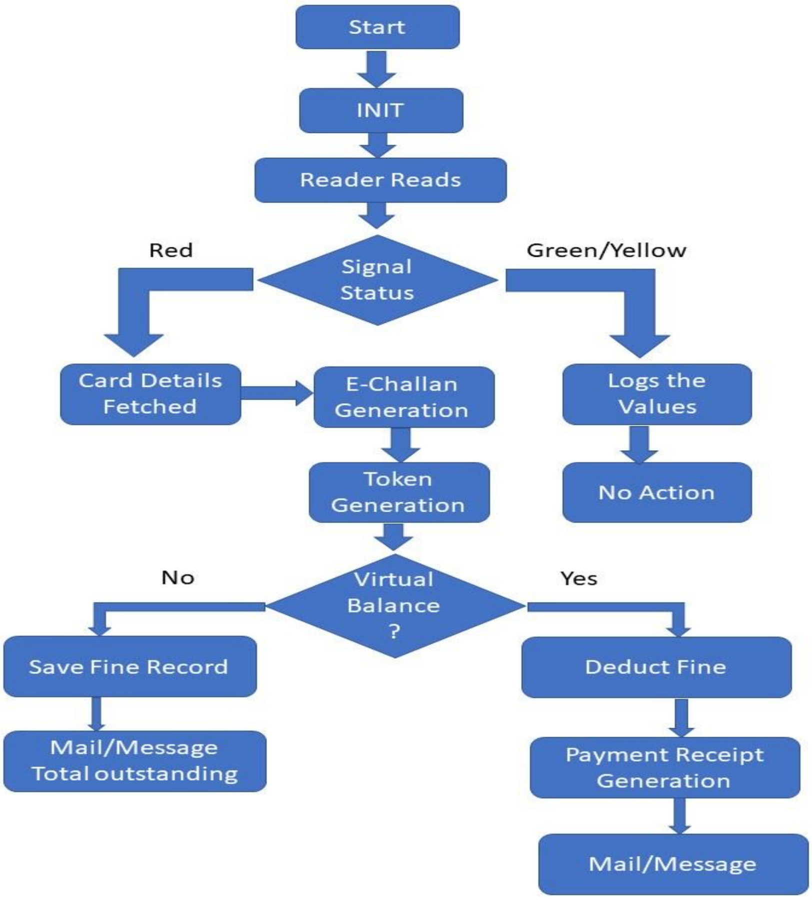

Fig-5: Fine Collection Procedure

They did is by developing a neuron from a logic gate. Here, the neuron is actually a processing unit, it calculates the weighted sum of the input signal to the neuron to generate the activation signal a, given by *Equation 1*

$$a = \sum_{i=1}^{N} w_i x_i \qquad \textit{Equation 1}$$

Fig-6: Shows the explanation of Equation 1

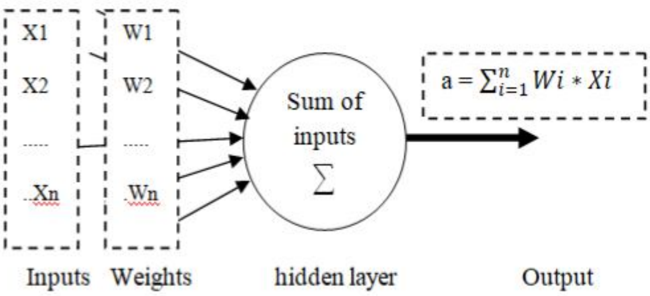

Fig.-6: ANN Algorithm Working

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Here it shows that, the inputs of all neurons are calculated along with their weights. Hence the weighted sum of all the inputs XiWi (X1W1, X2W2, X3W3.......XnWn), Where X represents input signals and W represents weights is considered as an output to the equation "a". These neurons are connected in a long logical network to create a polynomial function(s). So that to calculate multiple complex problems. In the architecture, more element needs to be added that is a threshold. Threshold defines the limits to the model. Threshold is defined as THETA (Θ) in neural network model. It is added or subtracted to the output depending upon the model definitions. Keeping this into consideration we have designed the following *Equation 2*

$$a = \sum_{i=1}^{N} W_i + X + K \qquad Equation\ 2$$

X Are vehicles on the road, W Is weight of vehicle And K Is reader's numeric value.

Each vehicle will hold value according to type of vehicle considering 1 for two-wheelers, 2 for light vehicles, 3 for heavy vehicles. We further compare resultant α value with certain defined value and the result of this comparison will decide increment time for signals. There will a threshold above which the signal timing cannot be incremented in order to avoid biased signalling system. Let's take an example considering there are 5 vehicles which are detected which has 2 two-wheeler, 2-light vehicle & 1 heavy vehicle and the signal counter as S=100. We take comparison parameter as a=100, b=150, c=300 and threshold θ as 30 (seconds). Computing will be as follows:

X= 5

ΣW_i= 9(2+4+3)

K=1

∴ α=46(5*9+1)

Now getting the value of α we compare with a, b and c.

If α<=a

S=S+θ-25 //adding 5 seconds to the timmer

Else If α>a && α<=b

S=S+θ-15 //adding 15 seconds to the timmer

Else If α>=c

S=S+θ//adding 30 seconds to the timmer

Else

Return //No change in current timer count.

The threshold and comparison factors may be modified according to needs and can be programmed in such a manner that it changes dynamically.

4.1 Implementation

A small prototype of the actual system is designed keeping in mind the bigger system architecture. We have used EM18 as RFID reader in place of Ultra High Frequency readers, raspberry pi as processing unit which will be connected to these readers with use of RS232 cable and also act as a server. The database used is MySQL for data storage and way2sms as the message carrier engine. Single point power supply is provided by connecting 12-volt dc 1a power supply to a power jack and then further wiring reader with male DC power cable. Raspberry pi also gives power to the signal lights using jumper cable to connect to its GPIO pins as shown in *Fig. 7*. Multiple python scripts are running to perform various computational tasks. Testing for cases were performed implementing these architectures where signal jumping is been checked.

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Fig-7: Prototype Model Testing

Here are some of the test which are performed and their results:

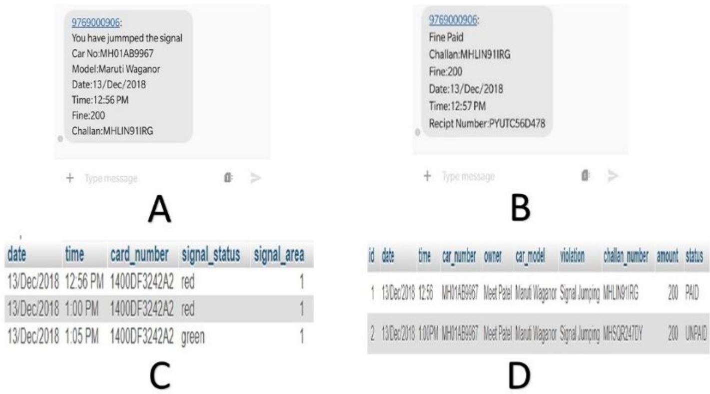

Fig-8: Results of Test

Considering Case 1, jumping the signal when the signal status is red and there is adequate balance in the virtual wallet. *Fig. 8A* shows challan details which is sent via message using Way2sms message carrier. *Fig. 8B* shows payment challan details which is sent via message using Way2sms message carrier. Case 2, signal jumping and card do not have adequate balance. *Fig. 8C* shows database entries for the fine records. Case 3, crossing the road while signal status is green. *Fig. 8D* shows the log table in the database.

5 FUTURE SCOPE

Proposed methodology uses single level perceptron for cross junctions and other city roads; use of multi-level perceptron can be used to manage the entire city signalling system efficiently. Further the system can also be integrated with the existing CCTV camera in order to generate proof of the traffic violation and send it to the user via mail.

6 CONCLUSION

The basic and primary objective of the proposed system is to provide an efficient and a robust system with minimum human efforts required. Just in time transaction of e-challan generation as well as collection and also it will help the governing body to decide on road development plan based on the reports generated. Using MLP (Multilayer perceptron) we can manage large cities like Mumbai which suffer traffic management problems. We have large scope of exploring the new modules which can be embedded in it which enhances the traffic management techniques.

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Image for representation purpose image source: https://www.kimeeryrfidtag.com/Content/ue/net/upload1/Other/219271/636276983553471437815564 5.jpg

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SMART V.I.P VOICE ASSISTANT

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ABSTRACT
In recent years with advances in new technologies, mobile devices have grown in popularity to become one of the most common consumer devices. Smartphones have played a very big role in bringing speech technologies into mainstream usage. The purpose of voice assistant systems is to exchange the information in a more interactive approach using speech to commune.

'Voice technology' has been with us for many years now, in this modern world of software's and apps, mobile phones are the very important part of modern life, many of us need to make a call or send a message to anyone at anytime from anywhere.

Keeping this in mind "Smart V.I.P Voice Assistant" is a bunch of different features which will be helpful for the visually impaired person to access some basic functionalities of android phone.

Keywords: Voice assistant, Visually impaired, Android, Artificial Intelligence, Application.

1. INTRODUCTION

'Voice technology' has been with us for many years now, in this modern world of software's and apps, cell phones are the very important part of modern life, many of us need to make a call or send a message to anyone at anytime from anywhere. Globally the number of people of all ages visually impaired is estimated to be 285 million, of whom 39 million are blind, out of this 37 million people over 15 people million are from India.

The word V.I.P stands for "Visually Impaired Persons". The visually impaired or blind people face many challenges daily in communicating with the world around them. They must depend on their sighted colleagues/friends for making a phone call and accessing other mobile functionalities. This system is a voice recognizing application for mobile phones that allow access to most of the functionalities of the phone and make it possible for visually impaired or blind people to connect with society. The sighted people with limited reading ability can also use this application if they are involved in activities that prevent them from reading.

2. PURPOSE

The purpose of this study is to discuss the development of Android-based intelligent software Assistant application for visually impaired or blind people. The application is intended to help people with visual limitations to access various Android features.

The visually impaired or blind people face many challenges daily in communicating with the world around them. They must depend on their sighted colleagues/friends for making a phone call and accessing other mobile functionalities. This system is a voice recognizing application for mobile phones that allow access to most of the functionalities of the phone and make it possible for visually impaired or blind people to connect with society. The sighted people with limited reading ability can also use this application if they are involved in activities that prevent them from reading.

The goal of this project is to develop voice assistant application that can be used by visually impaired persons to use basic functionalities of android phone. The convenience of being able to use android as normal peoples do, so convenience is one of the basic objectives of this application.

The key goals are – assisting the visually impaired person to perform different tasks, help to read documents, messages, notes etc. This application has implications for the society, especially those with eyesight issues can be so much more productive and independent. This can reduce the social burden in society.

The System is only used for visually impaired or blind people, hence there are no Credentials to make it very easy and reliable.

3. SURVEY OF TECHNOLOGIES

Following are some existing systems for visually impaired persons

- Be My Eyes (iOS) (Android)
- NantMobile Money Reader (iOS)
- TapTapSee (iOS) (Android)

- Color ID Free (iOS) (Android)
- identify (iOS)
- Seeing AI (iOS)
- ThirdEye (iOS) (Android)
- BeSpecular (iOS) (Android)
- ViaOpta Hello (iOS) (Android)
- Soundscape (iOS)
- Intersection Explorer (Android)
- Lazarillo GPS for Blind (iOS) (Android)
- Arianna Navigatio (iOS) (Android)
- Lazzus: blind gps assistant (iOS) (Android)
- Google Text-to-Speech (Android)

4. REQUIREMENTS AND ANALYSIS

3.1 Problem Definition

Blind people face a number of visual challenges every day – from reading the label on a frozen dinner to figuring out if they're at the right bus stop. Many tools have been introduced to help in addressing these problems using computer vision and other sensors (talking OCR, GPS, radar canes, etc.).

There are many existing systems available for visually impaired or blind people to overcome these challenges, which includes some software applications, devices and tools. The main problem with these systems is, they are separate from each other and it is not possible to carry all these at the same time.

"Smart V.I.P Voice Assistant" will be able to bunch some of the basic functionalities which are surely going to help visually impaired or blinds to overcome their problems.

3.2 Functional Requirement

The program should firstly be started on the Android phone. the initial mode of the program is Voice mode since this program aims at making a voice assistant program. However, if there are noisy conditions or users who prefer to operate in gesture mode can perform actions by using specific gestures or taps.

After the program has been started, the user should have correct voice input "command/request" to make those functions work properly. This program includes the functions and services of: Calling, Messaging, AI camera, Notes, Smart Reader, Music player, Location, Help, Battery and Time.

3.3 Security

Android has some built-in security features that significantly reduce the frequency and impact of application security issues. The system is designed in such a way that you can typically build your apps with the default system and file permissions and avoid difficult decisions about security. The following security features help to build secure apps:

- The Android Application Sandbox, which isolates your app data and code execution from other apps.
- An application framework with robust implementations of common security functionality such as cryptography, permissions, and secure IPC.
- Technologies like ASLR, NX, ProPolice, safe_iop, OpenBSD dlmalloc, OpenBSD calloc, and Linux mmap_min_addr to mitigate risks associated with common memory management errors.
- An encrypted file system that can be enabled to protect data on lost or stolen devices.
- User-granted permissions to restrict access to system features and user data.
- Application-defined permissions to control application data on a per-app basis.
- It is important that you be familiar with the Android security best practices in this document. Following these practices as general coding habits reduce the likelihood of inadvertently introducing security issues that adversely affect your users.

5. FIGURES

Fig-1: Loading screen

Fig-2: Menu screen

6. CONCLUSION

Race in every field in the era of proliferation, confidential and liberalization, has pushed up the use of technology including smartphone applications. With the augmentation of technology and the popularization of the smartphone, visually challenged people have the essential needs to disperse into the information age, make up physical shortcomings and enhance their learnability effects and efficiency by smartphones. The usability is very important to software. This paper has analysed existing applications for visually challenged people and proposed a better application that can help blind users to carry out their routine tasks smoothly. If the application is user-friendly and better in terms of usability, a person with visual impairment would find easier to accomplish their daily routine tasks.

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ONLINE SECURE FILE SHARING USING AES ALGORITHM

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ABSTRACT
The main problem of sharing file physically is that it can be tampered or compromised on the way. Once the file gets in the wrong hands it could be dangerous for both the parties. In today online world where the sharing of information has become seamless the problem of privacy brewed. Privacy breaching has been a burning issue everywhere.

'Secure File Sharing' is a website to ease the hassle of sharing files and giving utmost priority and importance to security and privacy. The files uploaded will be saved using AES algorithm on the server. The files can be shared either by mail containing link or directly within the website. Users don't need a new password every time for uploading a file. Privacy is given most importance as it doesn't track you are reads the contents of your file. All the data is deleted once you delete it.

Keywords: AES Algorithm, Symmetric key, Cipher, Cryptography,Online File Sharing.

1. INTRODUCTION

Sharing files is an activity that has been around almost since the infancy of computers. The prevalence of file sharing activity nowadays is attributed to the existence of a variety of methods that simplified this activity. These methods have gone through several stages until they reached maturity at the present time to become fundamental to any Internet user.

One of the oldest applications of the internet is File Sharing. One way of sharing files online is that where a user to upload files to a common space on the web and others users can download that files from the common web space.

File sharing can be done using different methods. The most common techniques for file storage, distribution and communication include the following:

- Removable storage devices
- Centralized file hosting server installations on networks
- World Wide Web-oriented hyperlinked documents
- Distributed peer-to-peer networks.

File sharing can also be done using internet, where a user can upload a file on the cloud or on the server of a website. . It can also be called as Online File Sharing. Peer-to-peer file sharing is built on the peer-to-peer (P2P) application architecture. Shared files on the computers systems of other users are indexed on directory servers. Popular services like Napster and Limewire used P2P technology. BitTorrent is most popular protocol for P2P sharing.

Cloud-based file syncing and sharing services execute automated file transfers by updating files from a dedicated sharing directory on each user's networked devices. Files placed in this folder also are typically accessible through mobile app and a website, and also can be easily shared with other users for viewing or collaboration.

Online file sharing can also be achieved through a cloud-based storage or collaboration solution that need users to upload the file on the cloud server or a storage platform. End users can edit, access, view and download the file by logging into the server. The file can be accessed through the Internet, irrespective of the geographical location of the user.

Following are the objectives of this proposed system

- Design an online file sharing website where users can upload files and another users can download them.
- Security: Users upload their data on server in encrypted form and also share their files in a more secure way to other authorized users
- Privacy preserving: Only authorized users can access the files uploaded by other users . For accessing the files they need to enter the secret key thereby improving the security of the system

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The Purpose of Project are

- To create a website which provide good interface to the user to share file which is more secure and data get encrypted and can access by the authorize users only.
- User upload the date and get encrypted and that data can decrypt by only one secret key which provide security to data and make it more secure file sharing.
- The data/file which got shared with other user can be downloaded only by providing the secret key while downloading.
- Provide a secure and encrypted environment to users to share file/data share online where the privacy and confidential is more important to user

2. SURVEY OF TECHNOLOGIES

There are many of online file sharing websites. Some famous sites are www.rapidshare.com, www.xdrive.com, www.megaupload.com, www.box.net etc.

All the websites which serves the purpose of online file storage/sharing usually have a size limit to upload files and have size limit to download files per hour due to space and bandwidth constraints.

Other forms of file sharing are FTP and P2P. File transfer protocol or FTP is a commonly used protocol for exchanging files over any network that supports the TCP/IP protocol. The FTP server, running FTP server software, listens on the network for connection requests from other computers or systems. The client computer system, running FTP client software, initiates a connection to the server. Once connected, the client can do any number of file manipulation operations such as uploading files to the server, download files from the server, rename or delete files on the server and so on. Most of the browsers present nowadays can act as a FTP client. Common FTP client software's are SmartFTP, CuteFTP, and DirectFTP etc.

[7]Peer-to-Peer(P2P) network is a type of network in which each workstation has equivalent capabilities and responsibilities. P2P file sharing network is usually used for sharing content files containing audio, video, data or anything in digital format and real time data. BitTorrent is a famous peer-to-peer(P2P) file distribution client application. P2P is best known for sharing files online and is more popular than the others any methods available.

7. AES ALGORITHM

The proposed system makes use of AES(Advanced Encryption Standard) to encrypt user data files before storing them on server.[1] The AES(Advanced Encryption Standard) is a crypto graphical algorithm and a computer security standard designed for security purpose and for protecting electronic data respectively. [2]AES(Advanced Encryption Standard) uses Rijndael algorithm by Joan Daeman and Vincent Rijimen for both encryption and decryption. AES(Advanced Encryption Standard) is an iterated symmetric block cipher, which means that AES works by repeating the same defined steps multiple times.

3.1 Operation of AES

[3]AES is an iterative rather than Feistel cipher. It is based on 'substitution–permutation network. The number of rounds in AES is variable and that depends on the length of the key. AES uses 14 rounds for 256-bit keys, 12 rounds for 192-bit keys and 10 rounds for 128-bit keys.

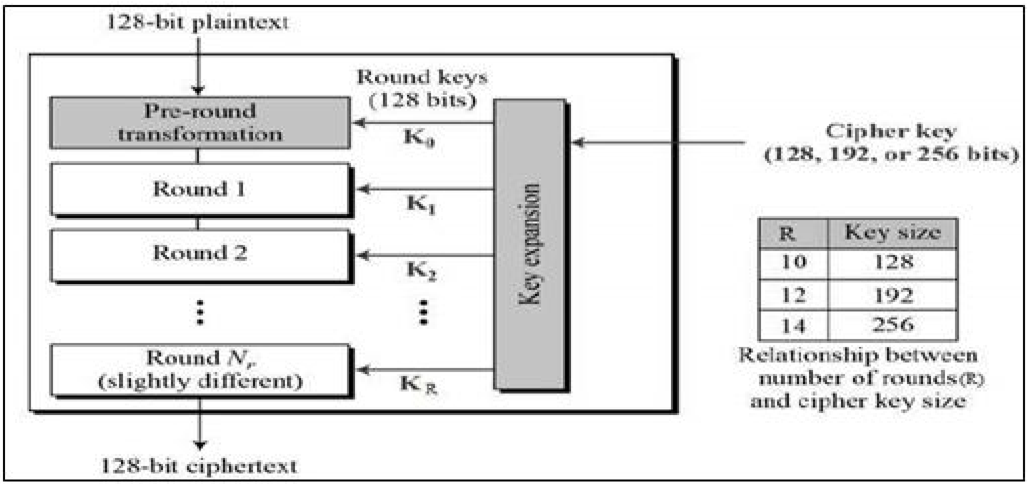

Fig-1: Operation of AES

3.2 Encryption Process

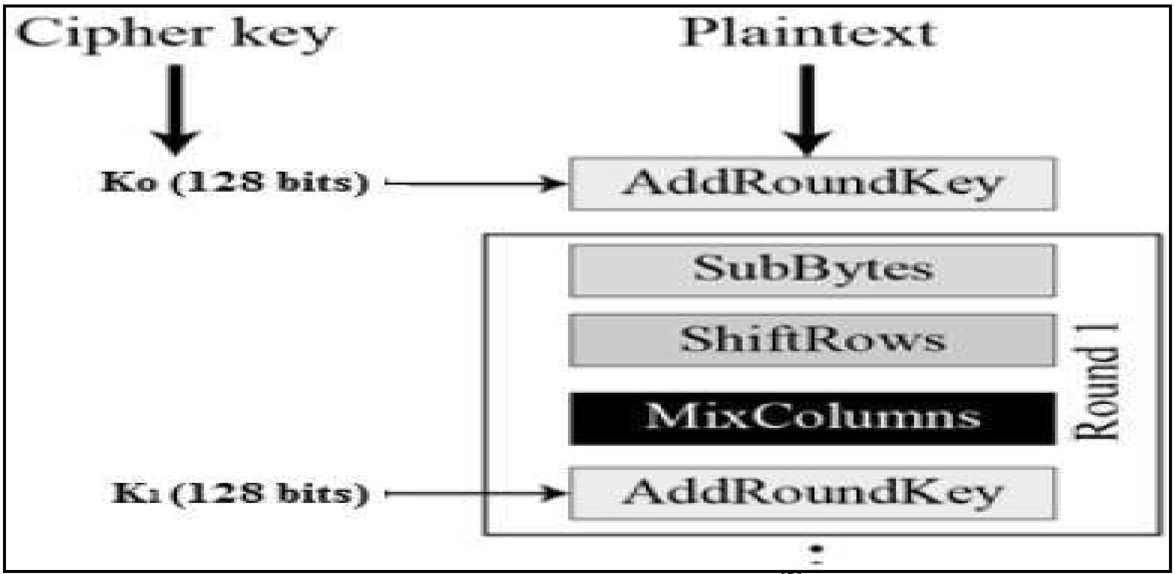

Fig.-2: Encryption Process of AES[3]

8. SYSTEM FLOW DIAGRAM

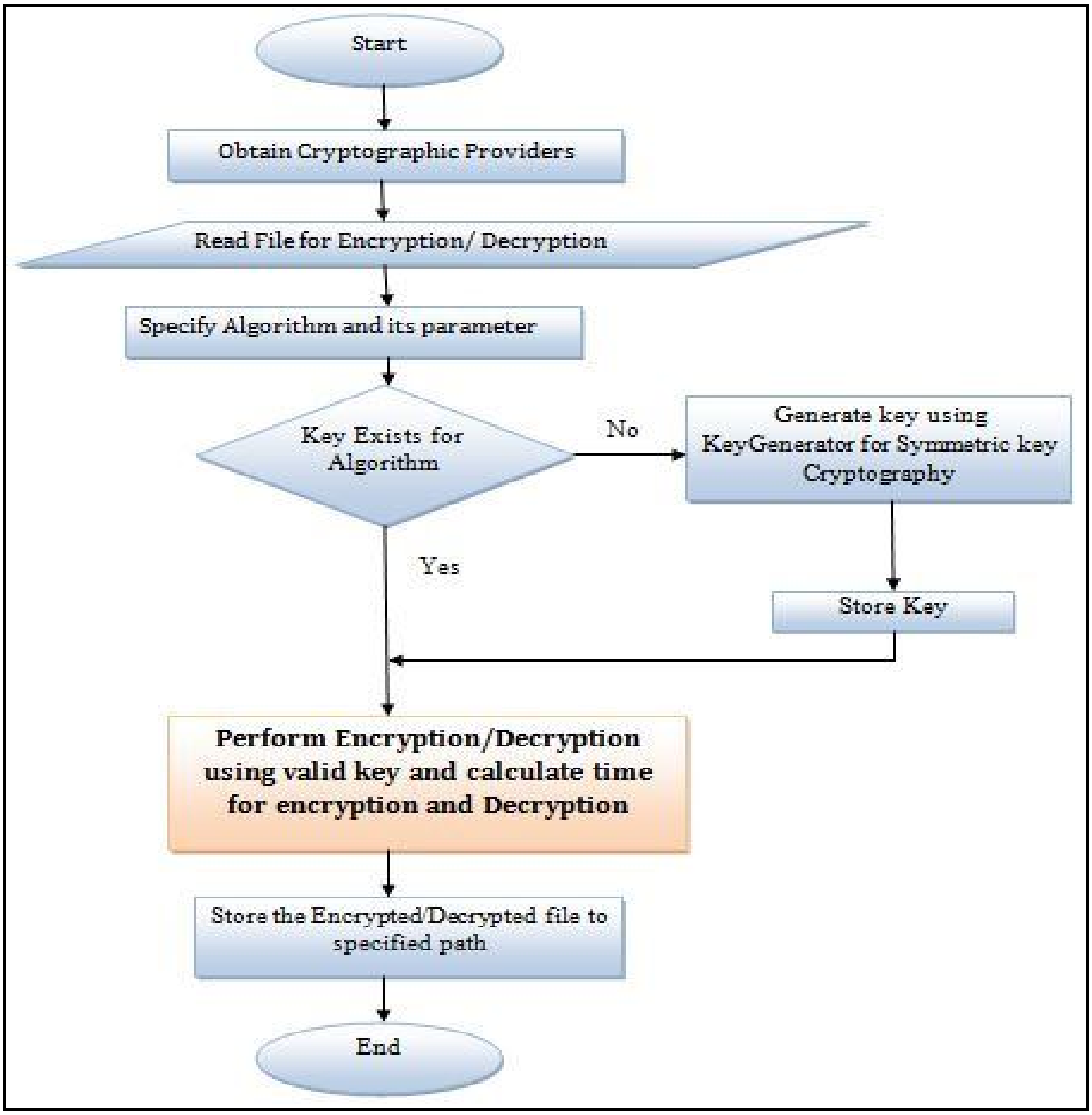

Fig-3: System Flow

4.1 User Interface Design

Home Page

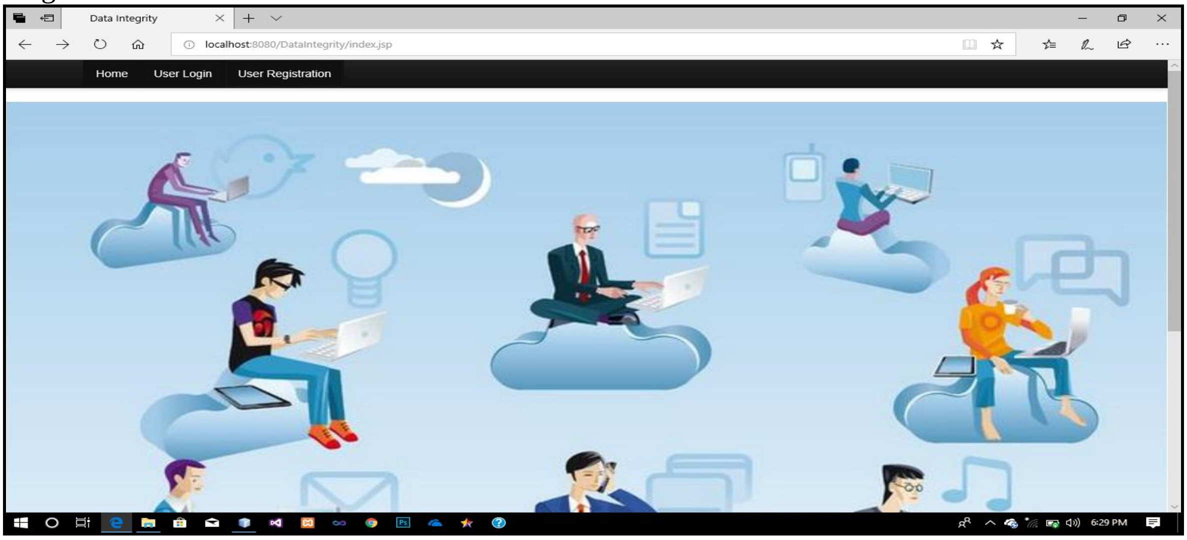

Fig-4: Home Page

Login Page

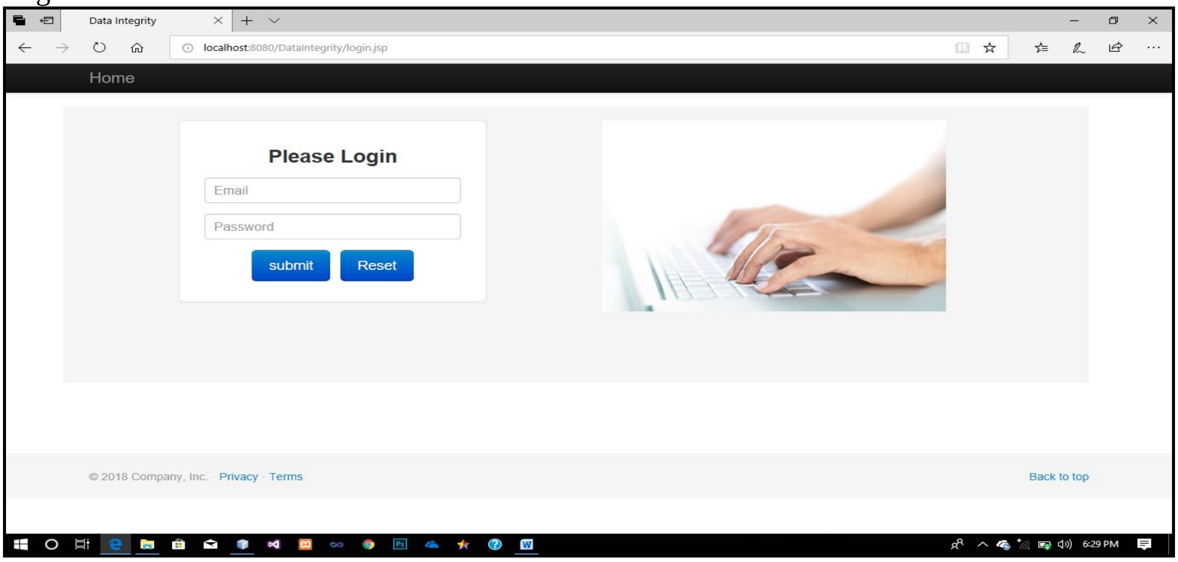

Fig.-5: Login Page

Register Page

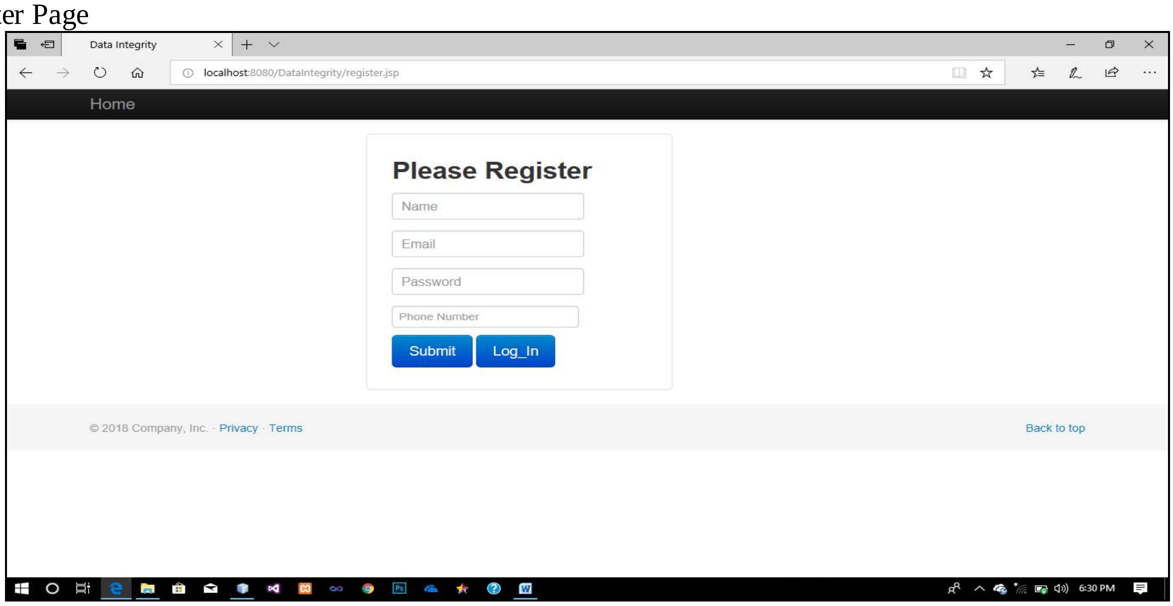

Fig-6: Register Page

File Upload Page

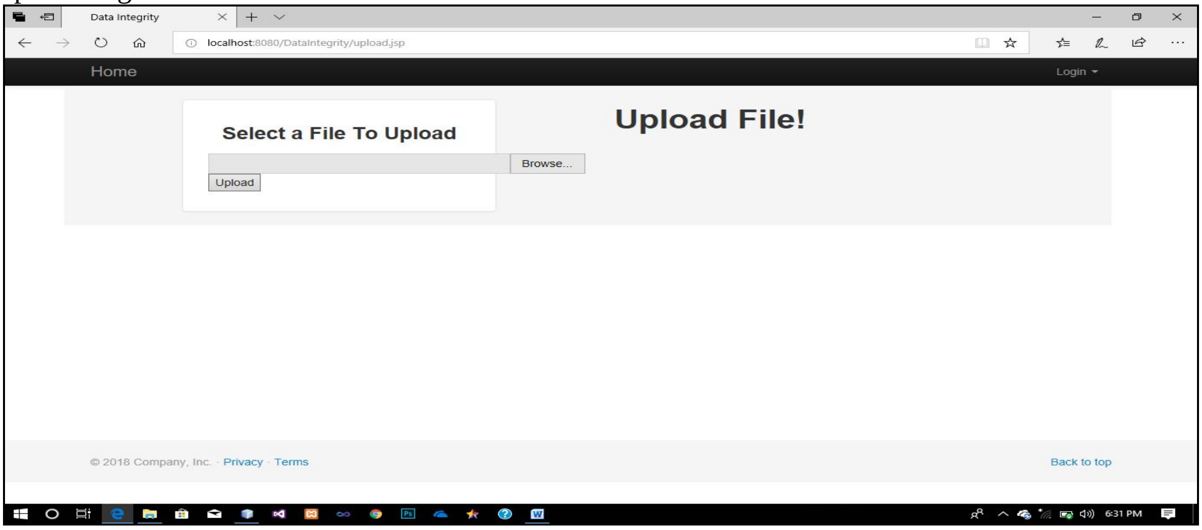

Fig-7: File Upload page

9. CONCLUSION

After reviewing the literature survey, it can be observed that there are two types of encryption i.e. symmetric and asymmetric. AES encryption is block cipher and popular algorithm used in symmetric key cryptography. AES data encryption is more mathematical efficient and elegant cryptographic algorithm and its main strength rests in the option for variation in key lengths. AES allows us to choose a 128-bit, 192-bit or 256-bit key, making it exponentially stronger than the 56-bit key of DES. The proposed system employs AES algorithm to secure uploaded data.

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FOCUSX FOCUS AT EXTREME LEVEL

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ABSTRACT
Getting a work done is one of the important part of your day to day life, but now a days we are very distracted in our work, and main reason behind the distraction is smartphone ,they are one of the most important part of our life but the user is unaware of their smartphone usage and this kind of distraction occurs because the user unable to control their smartphone application usage & because the smartphone is important they don't have any feasible method to help user control their addiction. But FocusX helps user to get focused in their work by removing all the distract full app which user won't use During their work and giving the user with a clean new UI where they can see and access those app which they are going to use during their work and it also block the notification of the app, so the user won't get distracted by unwanted notification of the unwanted app.

Keywords: Include at least 5 keywords or phrases.

10.INTRODUCTION
1.1 Background
In market there are several apps, which allows the users to control their phone addictiveness, using different type of methods. These apps method depends on the user's determination, this means the Success of the app depends on the user's determination So, by learning and understanding this concept I have Created a new method. This Methods success doesn't depend on the determination of the user, but it helps to control their addiction by blocking and stopping the notification of the app & giving them a new Android Desktop UI launcher to.

1.2 Objectives
This app helps the user control their addiction and help them to control their usage while Working, Studying, etc. This app also help user to Realize how much time he/she use their phone, which application they use the most, in a graphical way using different kind of charts in the app.

1.3 Purpose, Scope, and Applicability
1.3.1 Purpose
The purpose of the app is to help user focus more towards their important work while using their smartphone by disabling the notification of the unwanted app for the user by giving the use clean and minimalistic Android desktop UI where it will show only those app which the user will use during studies or work.

1.3.2 Scope
Phone is a necessary part of our day to day life. But we don't know how to control our usage of our Phone because of so many app in the Smart phone. Some are useful, and some are not that regularly useful and Our mind wonders off while checking out these apps and these app consumes huge amount of time of the user whether it useful or not, it depends on the user and there is some user who aware of their addiction and wish to limit their smart phone usage during their work.

1.3.3 Applicability & Feasibility
Before the developing of FocusX I did the applicability study by understanding why we get addicted towards smartphone usage. After understanding that I found out its dude huge number of Apps in our smartphone desktop. So, my idea is to block this distractive app by

User to accessing it and then hiding the app icon by using the launcher and blocking the notification of this unwanted apps for certain period of time, so there is already app in the Android play store For hiding the app[3] and blocking the app notification [2] so, the user can focus on their work By hiding unproductive and distractive app and blocking their notification In android we easily block the app if the user gives permission access to our app in his Android device.

11.LITERATURE REVIEW
The usage of smartphone is affected the user of different ages in different way and the youngest group, particularly adolescents, is the most highly affected by and at risk for both usage and behavioural addiction cell-phone use in adolescents is so important that some adolescents never turn off their cell phones at night which affects their daily work & studies [4].the literature review of so show that the user of age between 19-26 are the

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which are widely affected [5] . the Chóliz M research paper describe how users are dependent on the smartphone for various reasons. Although technologies involved are extremely useful and necessary for the society, but it is also a double edge sword which have its own disadvantages of using it i.e. excessive use which is described by him as "modern-day" addiction [6].The addiction in much more dissected way, "addiction to the device" (simply referred to as mobile addiction) and "addiction through the device" (i.e. application addiction) for mobile phones[7]. FocusX app is going help the user to control "addiction through the device".

12.METHODOLOGY

3.1 Data collection

We have collected the data of the use by using the survey method, taking survey in the Google Form by using questioner type survey method here we are collecting the data from undergraduate student where we have given them Closed-end survey question to answer in the digital form. Where we have given them optional based question.

- Which app do you use the most?
- How many hours do you use your phone every day?
- Is smartphone being useful for your day to day life
- Do you use your smartphone to increase your productivity?
- Which app is useful for your daily routine?
- Do you want to control your smartphone usage?
- Do you want to control your smartphone app usage during studies or work for better productivity?
- Do you think your time is wasted in unnecessary messages & app use which reduces your productivity?
- Do you like to use the app which will helpful to you to control the use of mobile and helpful to focus on your studies?

3.2 Experimental methodology

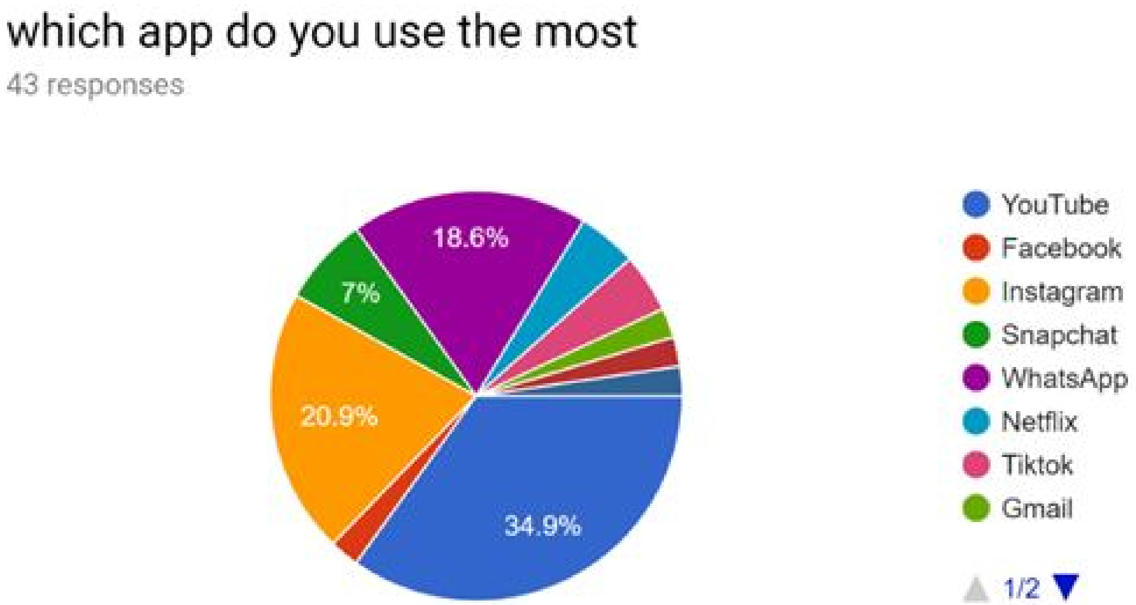
We proposed android based application to help student to focus on their studies by controlling the use of destructive mobile application.by hiding the app icon and blocking the notification and the giving the user a new Android UI i.e. Launcher where only user important study & work-related app will be shown.

13.RESULT AND ANALYSIS

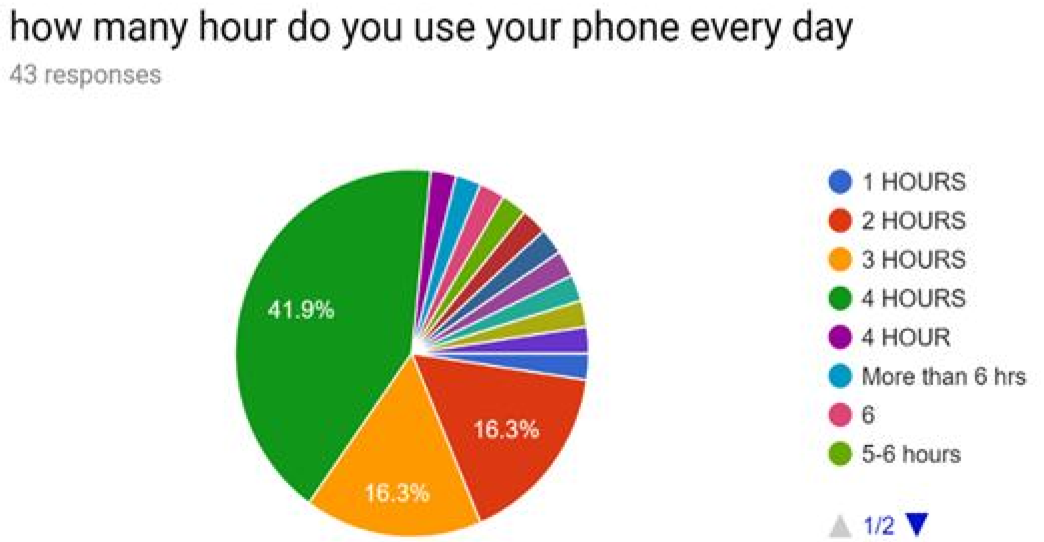
After the data collection from the google form we can now analyse the data for the research data to make

4.1 Statistical analysis of survey

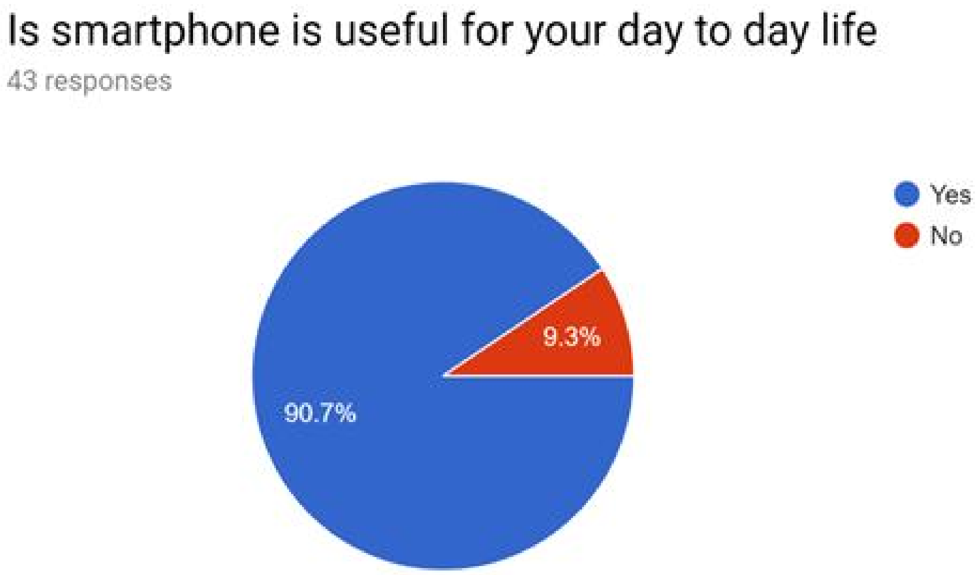
- Here we ask the user which app do they use the most every day, which takes most of their time in the phone usage



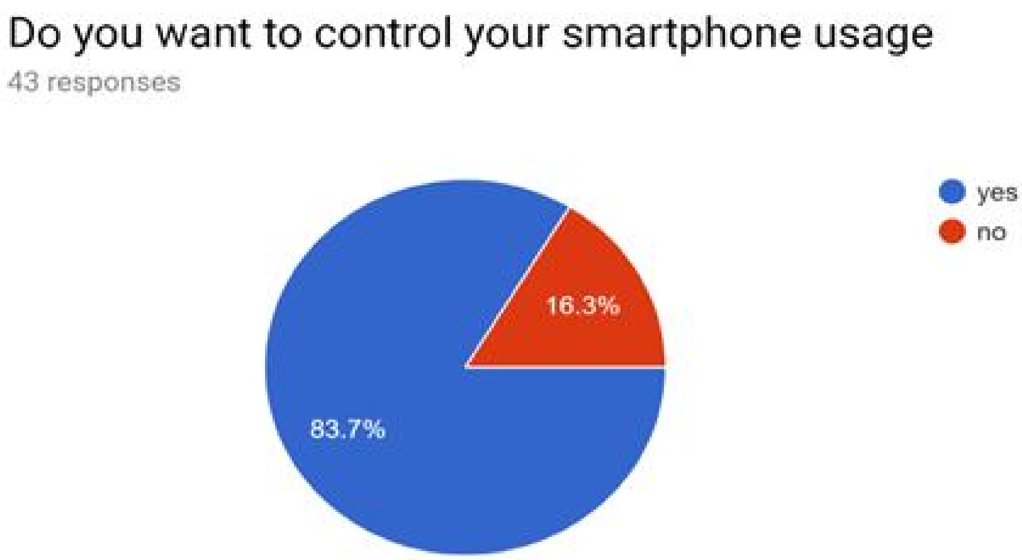
- Here we ask the user how much total amount of time i.e. hours is being consumed every day while using smartpone



- We ask the user having smartphone in their life in every day activity is actually useful for them.



- We asked this question to the survey to know that user are aware of the usage and actually are they wiling to control their daily phone activity.



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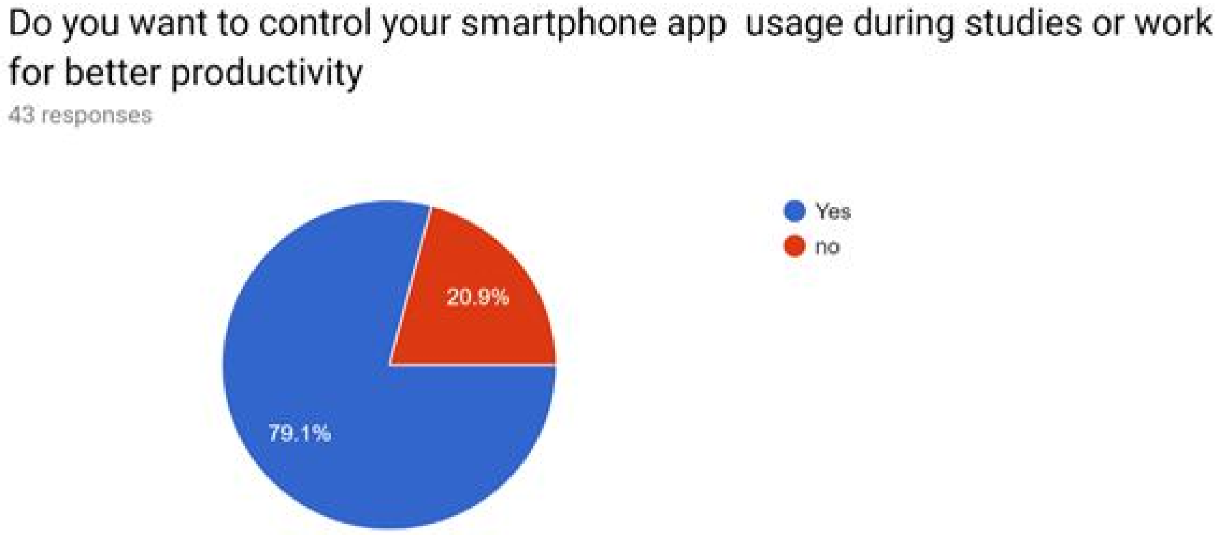
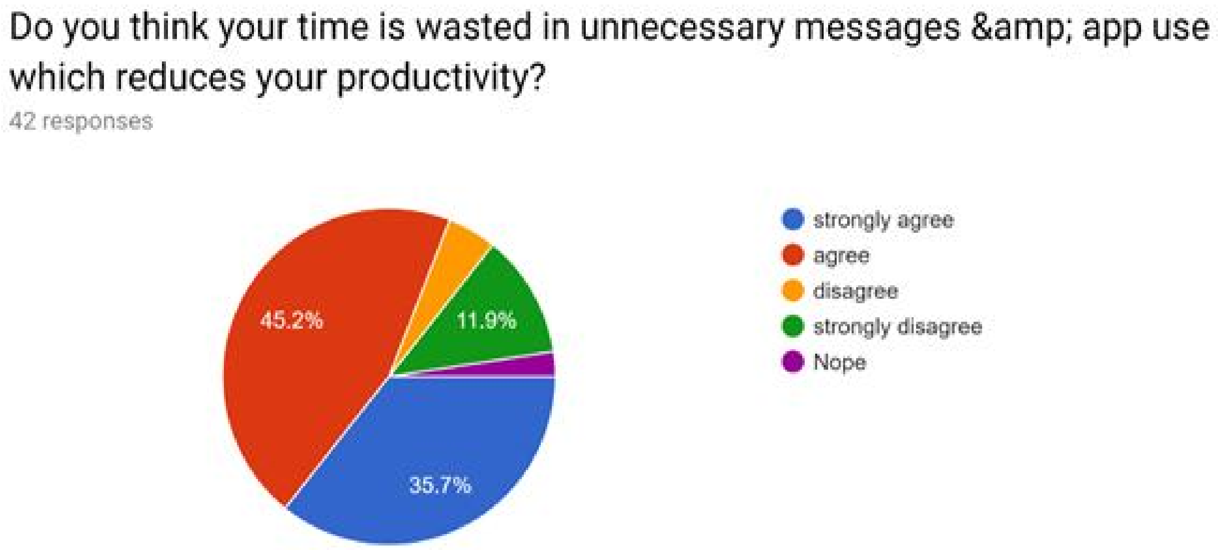
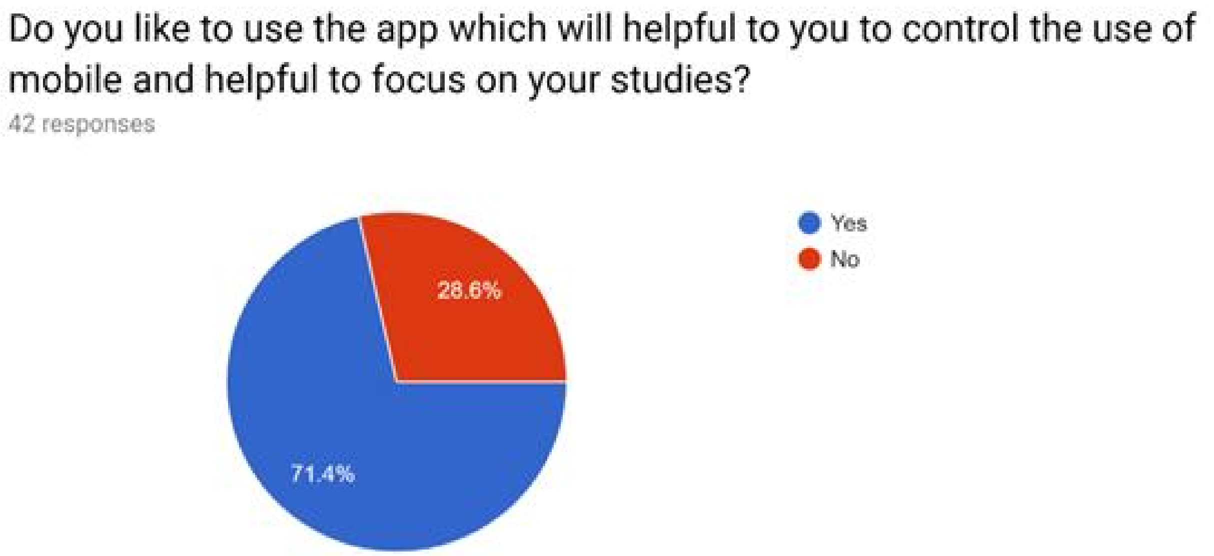
- We ask this question to know do user want to control there smartphone application usage during their crucial or important work.



- This question help us to strengthen or point that there app which are actually distractive and user are also aware of its use.



- We asked this question to know do user want the productive app and to know is my application is feasible in real world.



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4.2 proposed algorithm

Step 1: - First the user is going to open the app in android now the application is in the android stack process

Step 2: - Now the user is shown the list of installed apps in the smartphone taking the list from the Packgmanager of Android OS.

Step 3: - First the app is going to take the list of apps which they don't wish to block or hide so the app won't perform any action them, a database table or default_app_list is going to be created

Step 4: - Now the user will select the app which they will use while studying and working, a user_list table is going to be created in database.

Step 5: - the app will take the users selected app list and the default list of apps and merge it to create NoAction_list table in the data base & then it is going to dissect the unselected app and then create another table in the database Action_list.

Step 6: - Now the app is going to block the access to the unselected app and hide the notification of the unselected from the database i.e. Action_list

Step 7: - Now the user is going to select the amount of time they are going to be in the focus mode. The time selection will be in hours, after the user selected the time the app is going to set the timer from the moment when the user is going to click the Activate button.

Step 8: - Now the user will click Activate button and app is going to launch the launcher and its going to show those app & notification from the user selected and default app list i.e. user_list table from the data base.

Step 9: - There will be a timer in the notification bar and the launcher will automatically remove the launcher from the processing stack of android & the user will return to its normal launcher UI and all the blocked application will be accessible to the user.

Step 10: - If the user has any kind of issue or the user needs to access a certain app, the user can regain access of the app by just rebooting the Android smartphone.

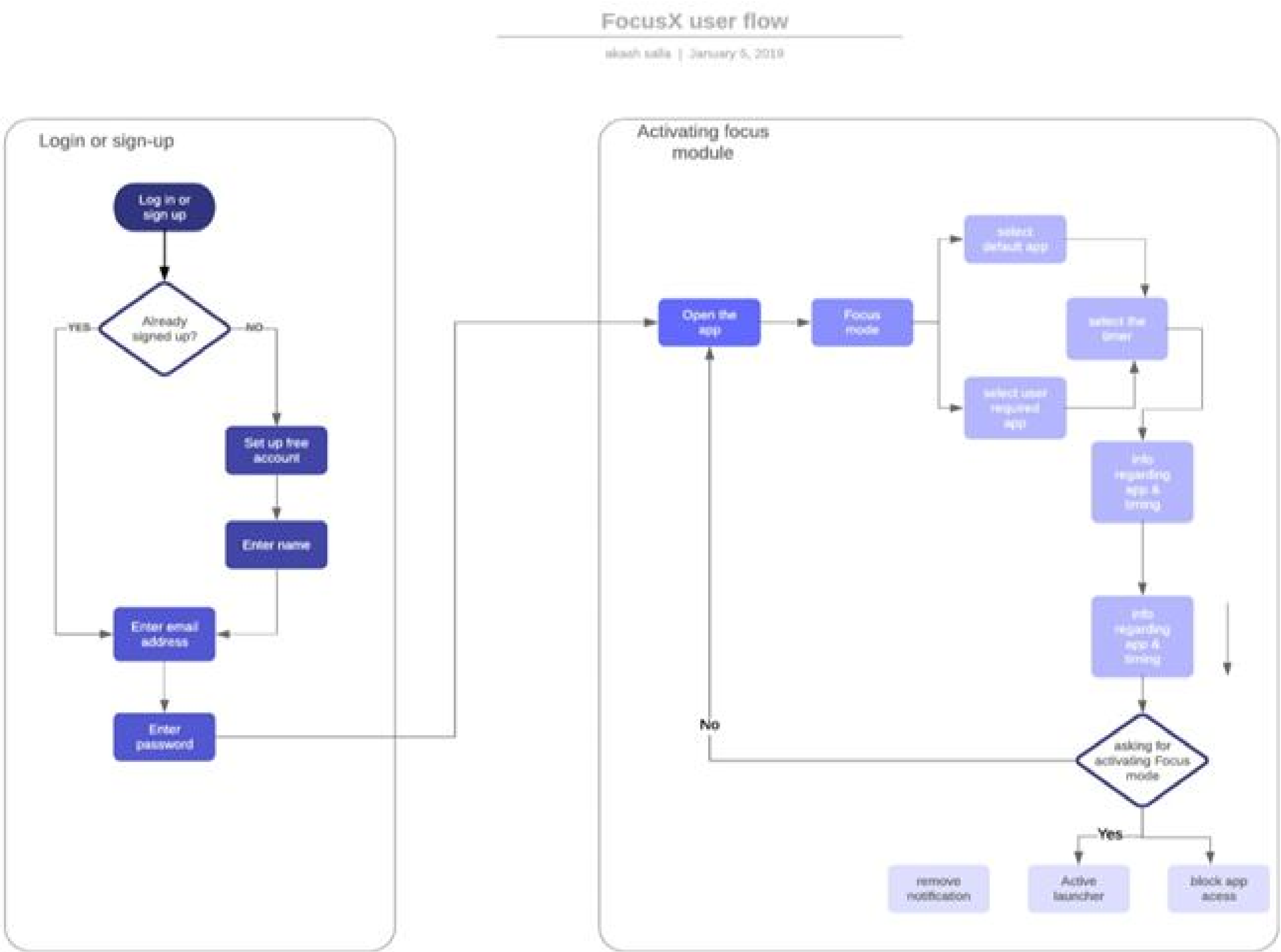

Fig-1: FocusX User flow diagram

14.FUTURE SCOPE & LIMITATION

In the future smartphone is going to be key part of our day to day life which indirectly means the interaction between user and smartphone is going to increase, smartphone is not addictive the apps which is being used by the use are, once the user gets aware of the app addiction they will automatically will reduce the use of app usage which will eventually will lead to less smartphone usage.

There are limitation we cant entirely remove smartphone form their daily activity because all work are now connected to smartphone, it has become key factor in the everyday life we can only help the user to tame its use.

15.CONCLUSION

We see that fakebook, Snapchat earning millions of dollars but at same time they are also investing heavily in design their platform to be more addictive, it’s not entirely users’ fault that they are getting addictive but it’s the app which is designed to be addictive. FocusX helps the user by making a better UI launcher to which helps them to tame their usage by showing less and useful apps.

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TO ANALYZE THE IMPACT OF EFFECT ON DEMONETIZATION AND THE ATTEMPTS FOR DIGITAL LITERACY AMONG FARMERS - MALAYATTOR-NEELEESWARAM GRAM PANCHAYAT

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ABSTRACT

The purpose of the study is to analyze the impact of effect on demonetization and the attempts for digital literacy among farmers. The term demonetization is a French word meaning "de mint". It is an act of stripping the currency unit of its status of its legal tender. It occurs whenever there is a change in national currency. On November 2017 the Indian Government decided to demonetize five hundred and thousand rupee notes. The two biggest currency system and accounted for 86% of countries cash supply. The agriculture sector seems to be one of the worst victims due to this ill-timed decision that came at the crucial stage of acute water shortage. Hence the project is a study on the difficulties faced by the farmers due to the note ban while gathering their views on the same.

The main aim of demonetization is to make India corruption free, to curb the black money, to control escalating price rise, to stop fund flow to illegal activities, to make people accountable for every rupee they possess and pay income tax return and finally it is an attempt to make cashless society and make digital India.

Keywords: Digital Literacy, Demonetization, digital education, investment, digital India.

1.1 INTRODUCTION

India is undoubtedly an incredible nation with its diversity linked by unity. Dr. Rajendra Prasad has described this unique brotherhood by presenting before us a beautiful necklace composed of colorful beads connected by a single thread. In a similar demonstration these beads could refer to the geographical disparity ranging from the towering Himalayas in the north to the unforgettable sunset at Cape Comorin. Thus depending on the soil texture and the climatic peculiarities of the region, India is a home to various kinds of crops which thrive in abundance. This has proved to be the fertile ground which nurtured the agrarian economy of India.

1.2 STATEMENT OF THE PROBLEM

This project aims to throw a light on the impact of demonetization borne by the farmers. It also focuses on analyzing the circumstances which prompted this decision, the aftermath along with laying down some of its merits and limitations.

1.3 SIGNIFICANCE OF THE STUDY

Although several months have passed since the declaration for the demonetization by the Modi government, its impact is felt even today. Several high profile figures have expressed their opinions both for and against the issue given the massive changes it has induced in all the sectors. The agriculture sector seems to be one of the worst victims due to this ill-timed decision that came at the crucial stage of acute water shortage. Hence the project is a study on the difficulties faced by the farmers due to the note ban while gathering their views on the same.

1.4 SCOPE OF THE STUDY

Although several benefits can be associated with demonetization, it is quite undeniable that normal life has been brought to a stand-still. All the sectors had borne the impact but have slowly begun to recover with the transition to online payments. However in case of agriculture with most of the farmers detached from the online world due to digital divide; they have still not come to terms with what has happened. Their situation has further deteriorated with the record low rainfall that has resulted in acute water scarcity. It is around the same time that several households were converted from the status of BPL to APL thus denying them of even the staple diet of rice and other necessities from the Public Distribution Shops (Ration Shops). Hence in the light of this topsy-turvy scenario of the agriculture sector in the Indian economy, this project has been prepared.

1.5 OBJECTIVES OF STUDY

To analyse the impact of demonetization on the farmers

2. REVIEW OF LITERATURE

Rakesh Kumar (2016) in this paper highlights the controversies that have emerged with demonetization in India. the controversy is about the likely impact on economy ,cash crunch in economy ,size of black economy, cost to government ,cost to public ,impact on growth and employment .he raises several questions like is India ready to make a successful transition to cashless economy as desired by government? Do we have enough capacity to cope with the increased traffic on our existing telecom due to digitization of economy? Do we have legal systems in place to deal with cyber-fraud?

According to Jisha Rajendran and Vidhi Maggo (2017), presently Indian economy is ridden with the sudden move of the government namely demonetization of higher currency note .it has resulted in monetary turmoil. The pros and cons of the strategy and the likelihood of success of the move in India are analyzed .it is evident from the discussion that demonetization could either follow the successful path ,like Europe ,or could receive a severe blow like Russia , korea and their likes, depending on its implementation and further strategies that will be adopted by the government ,as complementary measures to the on –going demonetization drive.

Sunitha V Ganiger and Ranganatha Bare(2017) are of the opinion that demonetization has created limelight ,an uproar and "hue and cry" among the public from November 8,2016.The media give a mixed reception either as a demonistic attitude or as an angelistic attitude. World leaders, social policy makers, economists, political scientists and common men discuss it in their own intellectual and emotional terminologies .Thus, this paper presents a sociological interpretation on Demonetization.

In this paper the researchers Shweta Mehta ,Krupa Patel and Krupa Mehta aim to study the advantages and disadvantages of demonetization and its impact on Indian banking sector. Despite major developments in paperless currency over the past decade ,physical cash remains widely used throughout the world therefore one of the main motivating factors for this study is to find out the alternatives of physical cash payments such as online bank transfer ,e-clearing ,e-KYC, digital locker and unified payment interface.

3. RESEARCH METHODOLOGY

3.1 Research Design

Descriptive and exploratory research methods have been adopted in order to clearly understand the objectives under study and to justify its scope. This research design is a fact finding investigation with adequate interpretation.

3.2 Data Collection Methods

Primary data

Also referred to as first hand data, this is data collected by the researcher himself. In this study the primary data has been collected by means of questionnaire administered by means of personal interview.

Secondary data

This is data already compiled by other authors and available from a variety of sources such the newspapers, journals, reference books etc. The secondary data has been collected from the internet and newspapers.

3.3 Sample Design

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or procedure the researcher would adopt in selecting items for sample. The samples employed for the study were farmers of Malayattor-Neeleeswaram Gram Panchayat. A sample of 100 farmers have been drawn. Non-random sampling methods such as convenience and snowball sampling were adopted. The questionnaire was administered by means of direct personal interview. Its analysis was done with help of graphs, pie diagrams, charts and also through descriptive writing.

4. DATA ANALYSIS AND INTERPRETATION

4.1 Gender of respondents interviewed

Table-4.1: Table showing the gender of respondents interviewed

Gender	Frequency(in numbers)	Percentage (in %)
Male	52	52
Female	48	48
Total	**100**	**100**

(Source: primary data)

Interpretation: The above table and the corresponding graph reveals that the number of men interviewed (52%) is more than that of women (48%). This is justified since in the village of Malayattoor-Neeleeswaram, men are the breadwinners of the family.

4.3 Income received during the current season

Table-4.3: Table showing the income received during the current season

Income received	Frequency(in numbers)	Percentage (in%)
0-40000	57	57
40000-80000	24	24
80000-120000	10	10
120000-160000	6	6
160000-200000	2	02
200000-240000	1	1
Total	**100**	**100**

(Source: Primary Data)

Interpretation: More than 3/4th of farmers earned an income ranging till 40000 rupees during the current season. Only a negligible percentage earned an income which exceeded 40000 rupees. All have stated that their income fell by roughly 30% this season.

Table-4.4: Table checking respondents having bank account

Particulars	Frequency(in numbers)	Percentage (in %)
Yes	88	88
No	12	12
Total	**100**	**100**

(Source: Primary Data)

Interpretation: The above data shows that 88% respondents have bank account, and the remaining 12% states that they don't have bank account. This is because various banks have come up with lots of benefits that attract famers. From the above table and graph it is observed that nearly all the farmers have opened an account with a bank although some of them stated it was credited with only the minimum balance. Thus with 88% of population in the banking sector, the financial literacy in the village is quite high.

Table-4.5: Showing the Frequency of transacting with the bank.

Marital Status	Frequency (in numbers)	Percentage (in %)
Daily	6	6
Weekly	23	23
Monthly	36	36
Quarterly	15	15
Biannually	4	4
Annually	2	2
Rarely	10	10
Never	4	4
Total	**100**	**100**

(Source: primary data)

Graph-4.5: Graph Showing the frequency of transacting with the bank

Interpretation: The above table and graph portrays that most of the farmers visit the bank on a monthly basis to either withdraw money at the beginning or to deposit the month end savings. Further since a good portion of them avail the banking services on a weekly (23%) and a quarterly (15%) basis, it can be concluded that the bank is in proximity of the region and the farmers have realized the importance of the banking sector to satisfy their needs especially to take loan for the crops and for the marriage of their children. With only 4% who never visits the bank and 6% who visits daily also expresses the wide disparity that exists.

Table-4.6: Table Showing the Population faces any difficulty in receiving payments from the wholesaler after the crop has been sold?

Particulars	Frequency(in numbers)	Percentage (in %)
Yes	66	66
No	34	34
Total	**100**	**100**

(Source: primary data)

Interpretation: The above table and graph shows that 66% of the Population says yes and 34% of the population says no they don't face any difficulty in receiving payments from the wholesaler after the crop has been sold.

Table-4.7: Table Showing the Population experiences a financial loss in terms of late payments, goods perishing after being unsold, general sluggishness in trade

Particulars	Frequency(in numbers)	Percentage (in %)
Yes	71	71
No	29	29
Total	**100**	**100**

(Source: primary data)

Interpretation: The above table and graph shows that 71% of the Population said yes and 29% of the population said no that don't experiences a financial loss in terms of late payments, goods perishing after being unsold, general sluggishness in trade.

Table-4.8: Table showing expresses the loss as a percentage in comparison to your average, income

Particulars	Frequency(in numbers)	Percentage (in %)
0%-10%	27.6	30
10%-20%	30	32.6
20%-30%	20	21.7
30%-40%	8	8.7
Above 40%	6.4	7
Total	**92**	**100**

(Source: primary data)

Interpretation: The above table and chart shows that 10-20% of the Population experiences a financial loss in terms of late payments, goods perishing after being unsold, general sluggishness in trade and 40% of the population experienced least financial loss.

5.1 FINDINGS

i. The study reveals that the number of men interviewed (52%) is more than that of women (48%). This is justified since in the village of Malayattoor-Neeleeswaram, men are the breadwinners of the family.

ii. More than 3/4th of farmers earned an income ranging till 40000 rupees during the current season. Only a negligible percentage earned an income which exceeded 40000 rupees. All have stated that their income fell by roughly 30% this season.

iii. The above study shows that 88% respondents have bank account, and the remaining 12% states that they don't have bank account. This is because various banks have come up with lots of benefits that attract famers. From the above table and graph it is observed that nearly all the farmers have opened an account with a bank although some of them stated it was credited with only the minimum balance. Thus with 88% of population in the banking sector, the financial literacy in the village is quite high.

iv. The above table and graph shows that 66% of the Population says yes and 34% of the population says no they don't face any difficulty in receiving payments from the wholesaler after the crop has been sold.

5.2 SUGGESTIONS

i. The only solution put forward by the farmers is the demonetization of the old notes of 500 and 1000.

ii. The implementation of this move could have been wiser by providing certain concessions such priority to the farmers for the exchange of notes during specified hours lest the whole day be wasted. Further some relief should have been provided with regard to the continued use of old 500 rupee bill for purchase of seeds and manure or fertilizers.

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iii. The exchange and deposit of money with the Post Office could have been extended. Further the RBI could have eased the policy towards the Cooperative banks much earlier.

iv. Banks must provide crop loans on easy credit terms and also relax the payment of regular installments from previous loans till things settle.

CONCLUSION

Demonetization has vacuumed cash from cash driven agriculture sector, thus setting in motion uninvited problems such as the steep fall in the income of farmers by as large as 30%. The crash of prices and the destruction of fresh supplies signal the dire situation. Modi's dream for a cashless economy became a 'reality' since the farmers had become completely broke in this crucial stage of transition from Kharif to Rabi. The farmers have delved deeper in the debt trap to meet all ends. Some of them have also given up their crops due to the cash crunch. The issue only aggravated with back-back droughts and severe water shortages. The lack of planning by Modi has been strictly criticized and the farmers have demanded for solutions to resume their lives back to normal such as the demonetization, liberalizing credit terms and also educating the masses on the basics of swiping and online payment. And eventually the skepticism will be replaced by sublime faith.

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A STUDY ON EVALUATION OF DIGITAL CAMPAIGN WITH REFERENCE TO DIGITAL BANKING

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ABSTRACT
It is a well-known fact that digital India is the outcome of many innovations and technological advancements. These transform the lives of people in many ways and will empower the society in a better manner. The 'Digital India' programme, an initiative of honorable Prime Minister Mr. Narendra Modi, will emerge new progressions in every sector and generates innovative endeavors for geNext. The motive behind the concept is to build participative, transparent and responsive system. Data has been collected via Primary Source and Secondary Source. For this purpose, various web sites. To understand the meaning of Digital India is the main objective of this paper. Data has been collected from various websites and journals have been used as it is a conceptual paper. Thus, the focus is to know more about the concept, its application and the impact on economy via other parameters. Therefore, qualitative and quantitative data have been used.

Keywords: Digital India, Digital Technology, e-Kranti, e-Governance.

INTRODUCTION
Digital banking is the move to online banking where banking services are delivered over the internet. The advantages for banks and customers are providing more convenient and faster banking services. The shift from traditional to digital banking has been gradual and should be rather described in degrees of service digitization than through a categorization into yes and no. It involves high levels of process automation and web-based services and may include APIs enabling cross-institutional service composition to deliver banking products and provide transactions. It provides the ability for users to access financial data through desktop, mobile and ATM services.

Digital banking account is easy to open and operate. The online services offered might differ from bank to bank, and from country to country. To know about the various services, always go through the welcome kit that you get at the time of opening the account. You also get the password to access your online account, which you are supposed to keep with great care for security reasons. The bank provides free home banking facilities to the clients, Mobile Banking Services and many more facilities.

The services offered by Digital India are as follows-

- Digi Locker
- MyGov.in
- SBM Mobile App
- Attendence.gov.in
- E-sign framework
- E-Hospital

REVIEW OF LITERATURE
Jain (2017) in his study concluded that some projects are under various stages of implementation which may require some transformational process to achieve desired objectives. Midha (2016) The author discussed the issue of digitalization process and effectiveness of digital India campaign. The programme is a good initiative but it has certain barriers which need to be overcome. Digital India campaign aims to create a cashless society which has its own advantages. Implementation phase is surely problematic as the concept is new but over the time period this has to be seen from the perspective of customers. It is high time to discuss the relevant issues with the customers so that the existing barriers may be removed. G. Smrithi et al. (2015) conducted a study on Role of HR and Financial services in making “Make in India” campaign a success. In this they have discussed the different ways to promote financial services, impact and importance of human resource in the manufacturing sector. They say that manufacturing sector needs to make a favorable framework so that domestic and foreign countries attract towards an Indian market. Skills and performance of the workers should be enhanced with different techniques for better results.

OBJECTIVES OF THE STUDY

- To evaluate the awareness and usage of cashless payment by consumers.
- To analyze the satisfaction level of bank customers towards digital banking in India.

RESEARCH METHODOLOGY

Data has been collected via Primary Source and Secondary Source. For this purpose, various newspapers and web sites were used. Primary Data were collected from bank customers through questionnaire. The period study is from September 2018 to November 2018. Total number of samples were 50. Convenience sample techniques was used to select the samples.

ANALYSIS AND DISCUSSION

- **Usage of digital banking**

The following table shows the whether the customer of banks have been used the digital banking or not.

Table No-1: Usage of digital banking

Responses	Number	Percentage
Yes	**45**	**90%**
No	**05**	**10%**

(Source: Primary Data)

From the above table number 1, it is understood that 90% of the respondents uses digital banking whereas 10% of the respondents don't use digital banking.

- **Rating of customer satisfaction on digital banking**

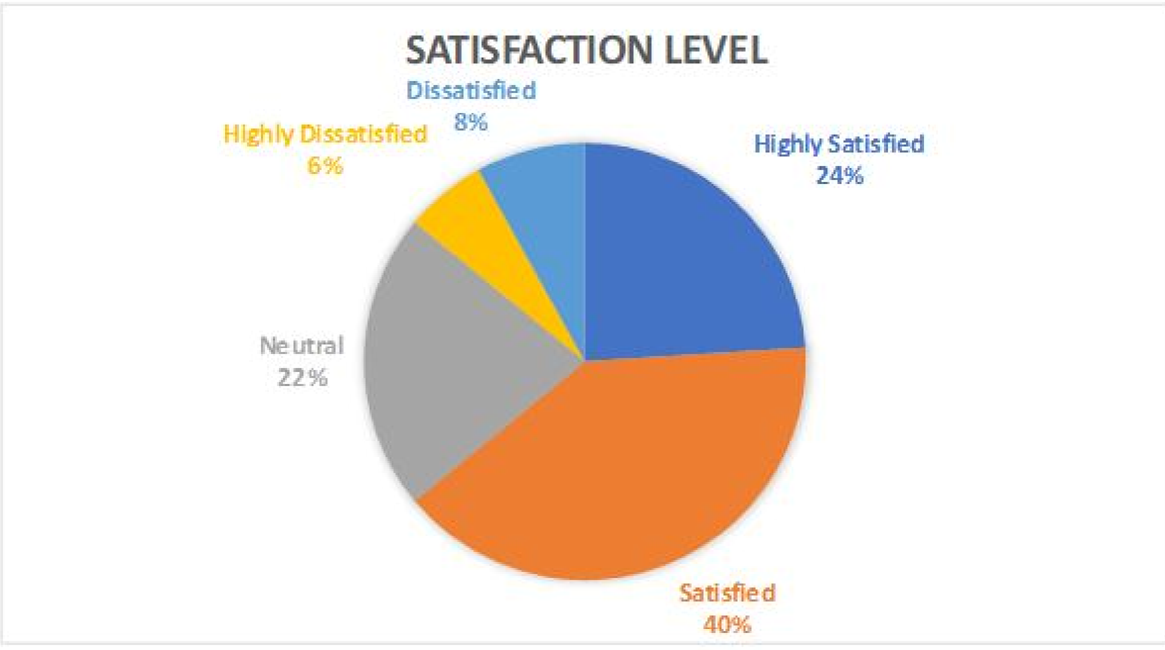
Following table shows the satisfaction level of the user towards digital banking

Table No-2: Satisfaction towards Digital Banking

Scale	Number	Percentage
Highly Satisfied	12	24%
Satisfied	20	40%
Neutral	11	22%
Dissatisfied	3	08%
Highly Dissatisfied	4	06%
Total	50	100%

(Source: Primary Data)

Chart No-2: Satisfaction towards Digital Banking



The above table and chart show that 41% of the customers are satisfied, 24% are highly satisfied. 22% of the customers are Neutral with their opinion towards satisfaction of digital banking. Very less percentage of the customers only not satisfied with digital banking.

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FINDINGS

- It may be seen that 90% of Respondents are aware of Digital Banking & 50% of Respondents are not aware of Digital Banking while opening an account. This shows that awareness of Digital Banking is not complete.
- Only 50% of respondents feel that transaction through internet banking is safe and human contact is important for Banking Relations.. Hence trust & faith are important factors required to increase Digital Banking.
- Many respondents feel that service charges of Digital Banking are high.
- Many Respondents are satisfied with the uses of Digital Banking & they feel that expectations from Digital Banking is satisfactory.

CONCLUSION

The Digital India programme is a wonderful initiative of the government that will empower the country to become a knowledge economy which is self-sufficient. The programme will help in increasing the opportunities and enhancing prospects through accessibility of information. It will allow the government to provide improved public services such as seamless integrated services across different jurisdictions, shareable private space on a public cloud and make financial transactions electronic and cashless. In short, a collaborative digital platform for participative governance which will help create accountability and transparency leading to public trust that will greatly facilitate India's journey towards becoming a developed nation.

SUGGESTION

A paperless digital bridge with the expected changes in mandates and regulatory frameworks could very soon remove physical interaction with banks altogether.

LIMITATIONS

The sample size of the study is limited. The study is applicable to Mumbai region only.

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STUDY OF EQUITY BASED FINANCIAL INSTRUMENTS IN INDIA

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ABSTRACT
Equity based investments are prime tools to build a good investment portfolio. Indian Financial Market provides various equity based financial products suiting individuals risk appetite and monetary strength. Compared to other investment avenues, equity investment yields higher returns but also carries high risk. Investor has to carefully choose right instrument and invest at right time. With recent development in technology, investors have easy access to these products and can track the progress. This paper focusses on the major equity based financial products available in Indian market and critically evaluates their characteristics.

Keywords: Equity based investments, Indian Financial Market, Risk Appetite

1. INTRODUCTION
Everyone earns money with an objective to fulfill one's life goals and attain financial independence. Money plays an important role in our lives. It helps to create wealth to ensure our future needs and objectives are financially supported as well as it serves as a transaction instrument for satisfying present needs. While financial planning allows individuals to meet life goals by prudent management of money and finances, it is observed that identifying correct investment strategies is the first step towards bigger goal. Every investor should carefully evaluate investment opportunities available in financial market and then select appropriate investment strategy to suite the need. Every financial product has its own benefits and risk. Usually high returns come with high risk and as the risk reduces, eventually returns also get reduced. In equity market, returns and risk go hand in hand by establishing a direct relationship. Investor should understand the nature of product to know the benefits and suitability. There are many barriers for investors to obtain accurate information about equity based products and related information. A few of such barriers are discussed by Baskaran, R. (2007) which include the barriers connected with companies, with brokers, Stock Exchanges, fellow investors, government agencies, availability of Information, SEBI, new issues and so on. Improvement in technology and ease of accessing information via internet has reduced some of above barriers but still obtaining correct relevant information remains challenge to individual investors.

Dr. Aparna Samudra and Dr.M.A.Burghate (2012) did a study on Investment Behavior of middle class households in Nagpur. Primary data was collected form 300 households based on income slabs defined in this study. The study showed that bank deposits are still popular and preferred investment avenue among investors in Nagpur. This followed by insurance, small savings schemes and PPF which are fixed return schemes. Tax advantage was one of the key factor deciding for investment avenues apart from high returns and stability.

Makarand S. Wazal, Sudesh Kumar Sharma (2017) concluded that population of retail investors in Indian equity market is dismally low when compared with other leading economies. However over the time period, the numbers have increased since the investor confidence is being maintained. More investors are still vary of direct investment in the equity market, but are taking keen interest to investing through passive investment thanks to the investor initiatives by AMFI in promoting investments in mutual funds. This can be noticed with 55 million investors in mutual funds (June 2017) compared to 29 million demat account holders (July 2017). Another noteworthy interesting fact is that half or more of the retail investment arises in western region of the country. Within this, major chunk of about three-fourth is from Mumbai and Pune cities.

2. EQUITY BASED FINANCIAL INSTRUMENTS
Financial products which are directly or indirectly linked to equity shares of any company are referred as equity based financial instruments. These products are dependent on equity shares traded in Indian stock markets and their returns are linked to market conditions. Among all investment alternatives, equity investment is considered to be high risk investment but at the same time provides higher returns as compared to other investment avenues. Returns on equity based financial products are based on stock value respective companies in Indian stock markets. Price fluctuation in Indian stock market is very high which increases the risk in investing equity but the same volatility also generates opportunities to earn extra ordinary returns if investor choose correct investment avenue.

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3. DIRECT EQUITY INVESTMENT

Direct Equity Investment refers to buying company stocks either in primary market or in secondary market. It involves buying and selling of Equity shares of any listed organization. Equity investments are considered high risk investment and if we further classify it between Direct and Indirect Investments, Direct Equity market investments can be considered as high risk investments.

3.1 Primary Market Investment

All organizations willing to get listed in Indian Stock Market has to roll out Initial Public Offer (IPO) to ensure retail investors buy equity shares directly from the company which will be later traded in secondary market. IPO is offered by companies looking to expand their capital by liquidating the ownership by way of equity shares. Most of the IPO are issues on premium over and above the face value of equity shares. Value of premium and offer price is often depend on company valuation and future aspects.

3.2 Secondary Market Investment

In the secondary market investor's deal in shares already issued by companies in Indian stock exchanges. For retail investor, this secondary market helps to trade in all existing issued company shares. Earlier shares used to manage on papers and ownership was recorded on papers but now with improved technology, shares are electronically stored and traded using demat account. This is most easy and convenient way of managing equity investments. Introduction of demat shares concept has boost the investor sentiment and promoted growth of secondary market by attracting more retail investors.

Prices of share in primary market are often decided in advance by the issuing company and are offered at pre-determined price whereas share prices in secondary market are primarily determined on demand and supply forces. As a basic principle high demand increases the share prices and low demand compared to supply reduces the share price. If investors think that a company has good growth and its stock value will increase, the demand for this stock increases with the stock price. On the other hand any negative sentiment will trigger a sale of stocks and will decrease the share price. Investor has to be very cautions while investing in direct or indirect equity investments as the risk is very high in these instruments.

4. INDIRECT EQUITY INVESTMENTS

Indirect Equity Investments are performed through mediator who takes decision on behalf of investor and trade in equity stock market. Retail investor prefer this way of investment as it requires less supervision and market knowledge compare to direct investment. Money is invested in financial products which in turn trade in stock market so retail investor does not directly buy shares in stock market. Also these investments are managed by well qualified experts and all decisions are taken based on thorough research and analysis. Investment risk is also low to moderate in these investment avenues as these are strictly governed and managed by experts. Below are few well known Indirect Equity Investment avenues.

4.1 Insurance Policies and Unit Linked Insurance Plans (ULIP)

Unit linked insurance plans are popularly known as ULIP which is a prominent investment option among retail investors. ULIP is a combination of insurance and investment. In this plan policyholder pays premium monthly or annually as per agreed schedule and a part of amount of the premium goes to secure life insurance whereas rest of the money is invested in equity/debt as per ULIP guidelines and mentioned in offer document. In this investment plan premiums paid are invested in the funds chosen by investor after deducting allocation charges and maintenance charges including those for managing funds, policy administration and for providing insurance cover.

This product provides combine benefits of life insurance as well as provide an opportunity to earn from equity investment. Also the tax exemption on these schemes makes this product more attractive and popular among salaried retail investors. ULIPS also offers to switch portfolio between debt and equity based on investor risk appetite as well as knowledge of the market's performance. Below are few features of ULIP

- ULIP provides Life cover and act as term insurance plans.
- Premium paid towards ULIP are tax exempted.
- Small premium amount paid every month helps to accumulate good wealth to finance long term goals
- ULIP provides flexibility to change plans and opt for an investment plan suiting investors risk profile.
- ULIP are considered to be a bit high risk products when compared to schemes like (Equity Link Saving Schemes) ELSS

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4.2 Mutual Funds

Mutual funds are most popular product among retail investors to invest in equity market. It provides an easy way of investing as well as required minimum supervision and market knowledge. As per Wikipedia definition, 'A mutual fund is a professionally managed investment fund that pools money from many investors to purchase securities. These investors may be retail or institutional in nature.'. Mutual funds collects money from investors and invest them in equity/debt market by charging a small fee for managing the fund. Below is a brief presentation of Mutual fund investment cycle.

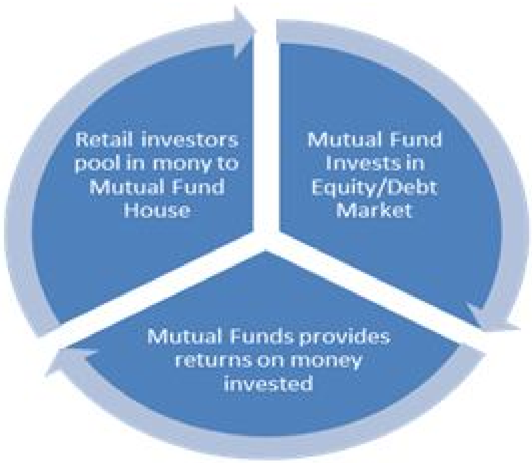

Figure-1: Mutual Fund Investment cycle

Priti Mane (2016) presented customer perception with regard to the mutual funds that the schemes they preferred, the plans they are opting and the reasons behind such selections. Thirty investors of Aurangabad city were selected for this sample study. Three hypotheses were tested using Chi square for association using IBM SPSS software. Both hypotheses were tested with 95% confidence level i.e. at 5% significant level. This research examined different investment options, which people prefer along with and apart from mutual funds, like banking products, postal deposits, equities and bonds. The research concluded that investors are not keen on taking advice from certified experts to direct them for their investment in mutual funds. This is limiting their ability to choose correct mutual fund to match their needs and goal.

Mutual funds are formally registered with Securities and Exchange Board of India (SEBI) who regulates security market. Mutual Fund houses act as trust that invest investors' money by deducting administrator and fund management charges. They do not earn profit on investments which are made out of retail investor's money. Investing in Mutual fund is as easy as buying a stock. With enhance technology; Mutual can be bought within minutes via online portals of fund houses as well as brokers. Mutual fund organizations should primary focus on upgrading their skills and technology to attract more investors.

Dr. Binod Kumar Singh (2012) studied investor attitude towards mutual funds as an investment option. The study was done by contacting 250 investors in Ranchi suggest that investors are still not fully aware of all mutual fund options and operations. The study further states that in India there is a huge scope for the growth of mutual fund companies provided that the funds satisfy everybody's needs and improves their service standards.

Ms. Shalini Goyal and Ms. Dauly Bansal (2013) performed a study on Mutual Funds in India and journey of mutual funds in financial market. The study presented that considering high prospects of Indian Economy, Mutual Funds will be primary focus for retail investors. With regard to the Mutual Fund investor the study present the view that investor need to adopt two crucial skills for successful investing i.e. a sense of timing and investment discipline which need to be adopted at same time.

Gaurav Agrawal and Dr. Mini Jai (2013) presented a paper on 'Investor's Preference towards Mutual Fund in Comparison to other investment avenues'. The Study concluded that post analyzing & interpreting the data received from the respondents, maximum investors are only aware about Banks & LIC investment avenues. Considering safety and fixed returns with banks, the investors are more inclined towards Bank FDs and LIC policies.

Dr. Ravi Vyas (2012) studied 'Mutual Fund Investor's Behavior and perception in Indore City' to find out investors preference in investment options and their general awareness level. The study states the Mutual Fund houses should drive more awareness initiatives for investors to increase retail investor share in equity market. Investors should also get more information about mutual funds and start investing in these instruments.

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5. CONCLUSION

There are multiple investment avenues available in Indian equity market for retail investors. Investor should carefully gather all the information related to these investment products and then choose the most appropriate option considering their financial goals, risk appetite, investment amount and income. Considering high inflation, relying only on traditional investment products like bank FD, Post office schemes will not suffice future needs and financial arrangements. Investors should look beyond these traditional options to earn more returns by investing in Equity Market investments either through direct or indirect equity investments.

Direct Equity investment has high potential to provide better return but also carries high risk as investor directly invests in stocks based on individual analysis and study. These investments are risky but if done with proper study can give extra ordinary returns. On the other hand, indirect investments like Mutual funds give moderate returns with comparatively low risk. These investments require minimum supervision as these are managed by market experts.

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A COMPARATIVE FINANCIAL ANALYSIS OF LEADING FMCG COMPANIES IN INDIA

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ABSTRACT

This paper talks about the profitability and liquidity of the leading FMCG companies. In this paper researcher have analysed the various profitability and liquidity ratios of the companies. This paper shows the financial status of the companies in proportion to debt and equity.

Keywords: FMCG, Profitability, Liquidity, Dabur, HUL and Britannia.

1. INTRODUCTION

Fast moving consumer goods is the 4th largest sector and contributing majorly to economy. FMCG is divided in three segments i.e. Health care, Food products, Household and Personal care products accounting to 19%,31% and 50% of the sector.

FMCG sector is further expected to grow at CAGR OF 27.86% by year. The revenue share from rural area accounts to 45% and urban area is 55%.Due to awareness, changing lifestyle and easy access to products through e-commerce platforms are some major reasons for growth of FMCG sector.

Dabur (Dabur India Ltd.) is one of the India's biggest Ayurvedic drug and normal purchaser items maker.

Dabur demerged its Pharma business in 2003 and hived it off into a different organization, Dabur Pharma Ltd. German organization Fresenius SE purchased a 73.27% value stake in Dabur Pharma in June 2008 at Rs 76.50 an offer.

Dabur's Healthcare Division has more than 260 items for treating a scope of infirmities and body conditions, from basic cold to interminable loss of motion. Dabur International, a completely claimed backup of Dabur India once in the past held offers in the UAE based Weikfield International, which it sold in June 2012.

Britannia Industries Limited

Britannia Industries Limited is an Indian sustenance items organization headquartered in Kolkata, West Bengal. It moves its Britannia and Tiger brands of scones, breads and dairy items all through India and in excess of 60 nations over the globe. Britannia has an expected piece of the overall industry of 38%.

The organization's main action is the make and closeout of rolls, bread, rusk, cakes and dairy items.

The organization was set up in 1892, with a venture of ₹ 265. At first, bread rolls were produced in a little house in focal Kolkata. Afterward, the venture was procured by the Gupta siblings for the most part Nalin Chandra Gupta, a lawyer, and worked under V.K Brothers." In 1918, C.H. Holmes, an English representative in Kolkata, was gone up against as an accomplice and The Britannia Biscuit Company Limited (BBCo) was propelled. The Mumbai processing plant was set up in 1924 and Peek Freans UK, procured a controlling enthusiasm for BBCo. Bread rolls were sought after amid World War II, which gave a lift to the organization's deals. The organization name was changed to the current "Britannia Industries Limited" in 1979. In 1982 the American organization Nabisco Brands, Inc. procured the parent of Peek Freans and turned into a noteworthy remote investor.

Hindustan Unilever Limited (HUL) is an Indian shopper merchandise organization situated in Mumbai, Maharashtra. It is a backup of Unilever, a British-Dutch company. HUL's items incorporate sustenance's, drinks, cleaning specialists, individual consideration items and water purifiers.

HUL was set up in 1933 as Lever Brothers and, in 1956, wound up known as Hindustan Lever Limited, because of a merger among Lever Brothers, Hindustan Vanaspati Mfg. Co. Ltd. furthermore, United Traders Ltd. It utilizes more than 16,000 workers, while it likewise in a roundabout way encouraging the work of more than 65,000 individuals. The organization was renamed in June 2007 as "Hindustan Unilever Limited".

In January 2019, HUL said that it hopes to finish the merger with Glaxo Smith Kline Consumer Healthcare (GSKCH India) this year.

2. LITERATURE REVIEW

Ranjit Kumar Paswan examine the financial performance of selected companies in terms of solvency stating ITC,Emami,Dabur and Colgate are able to make repayment of debt during the study period. DTR of selected company Nestle and Colgate were efficient compared to selected companies. Debt to Total ratio of Dabur and Emami depicts more assets financed through debt.

Viral Chavda analyzed that there is significant difference during the study period between profitability and liquidity ratios of Godrej Ltd,Navneet Education,Colgate,Dabur Ltd and Britannia Ind Ltd. As the companies are having different liquidity the profitability of selected companies varies.

3. RESEARCH METHODOLOGY

3.1. Purpose of the Research

India rank first in the world in consumption of consumer products. There are many FMCG companies in India but not all the companies can maintain the profitability and liqudity. Indian FMGC market is full of competition, but not all companies can survive in the market.

3.2. Objective

- To analyse the profitability and liquidity of leading FMCG companies in India.

3.3. Methods of Data Collection

Secondary data was collected through FMCG Companies website and various websites

3.4. Research Design

The research design deployed was explanatory research design. It was descriptive in nature.

3.5. Delimitations of the Research

The research is conducted only on selected time period 2013-14 to 2017-18 and omnly 3 FMCG companies profitability and liquidity is analysed

3.6. Limitations of the Research

Limited time and economical constraint was faced by the researcher.

3.7. Data Analysis Methods

Data is collected by the websites was analysed to generalize the findings and draw conclusions of the research study.

Profitability Ratio

Gross profit margin: $\frac{(\text{Revenue} - \text{COGS})}{\text{Revenue}}$
Net profit margin: $\frac{\text{Net Income}}{\text{Net Sales}}$
Operating profit margin: $\frac{\text{Operating Profit}}{\text{Net Sales}}$
Return on capital employed: $\frac{\text{EBIT}}{\text{Capital Employed}}$
Return on net worth: $\frac{\text{Net Income}}{\text{Shareholder's Equity}}$

Liquidity Ratio

Current ratio: $\frac{\text{Current Asset}}{\text{Current Liability}}$
Quick ratio: $\frac{(\text{Current Asset-Inventories})}{\text{Current Liability}}$

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4. FINDING AND ANALYSIS

4.1. PROFITABILITY PERFORMANCE

Gross Profit Margin

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	12.83	11.69	12.25	8.13	7.26	10.432
HUL	19.24	16.32	16.9	15.92	14.91	16.658
DABOUR	19.69	18.98	17.52	15.69	15.21	17.418

Gross profit margin indicates the company's efficiency in generating the profit during the production process. Gross profit margin is margin from sale of inventory.

The gross profit margin of the Britannia, HUL and Dabur are increasing during the study period. During the study period, the profit margin of Dabur is greater than compared to HUL and Britannia.

Operating Profit Margin

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	15.56	14.57	14.1	10.42	9.02	12.734
HUL	20.86	17.84	18.47	17.92	17.13	18.444
DABOUR	24.73	24.1	21.12	18.46	17.74	21.23

The operating profit margin is the profit generated after deducting all the operating expenses from revenue. The operating profit margin of selected companies individually have a growth during the study period.

From the table, it is seen that Dabur has greater profit margin followed by HUL and Britannia.

Net Profit Margin

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	10.212	9.828	9.51	8.76	5.93	8.848
HUL	14.87	13.01	12.762	14	13.8	13.6884
DABOUR	19.11	18.83	16.36	14.07	12.91	16.256

Net Profit margin is obtained by deducting operating expenses as well as the interest and taxes. A greater margin indicates company’s efficiency in generating profit from sales.

The profit margin of selected companies also increases during the study period. From the three selected companies the net profit margin on Dabur is greater than HUL and Britannia.

Return on Capital Employed

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	44.67	48.45	67.16	58.96	63.8	56.608
HUL	103.84	94.83	160.27	113.84	109.21	116.398
DABOUR	32.82	27.64	32.11	41.18	43.42	35.434

Return on capital employed indicates the profit generated against the funds employed. It's a long-term profitability ratio.

During the study period ROCE of Britannia is decreasing. In case of HUL and Dabur, ROCE is not stable. From the three selected companies, ROCE of HUL is greater followed by Britannia and Dabur.

Return on Net Worth

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	29.29	32.67	44.05	50.37	43.33	39.942
HUL	74.02	69.18	63.15	115.85	118.01	88.042
DABOUR	25.36	27.64	32.71	32.64	35.33	30.736

4.2. LIQUIDITY RATIO

Current Ratio

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	2.025	1.84	1.055	1.188	0.897	1.401
HUL	1.289	1.306	1.027	1.054	1.028	1.1408
DABOUR	1.586	1.478	1.324	1.248	1.732	1.4736

Current Ratio shows the portion of current assets which can be easily converted to cash to meet its short-term debts. The current ratio of Dabur is higher followed by Britannia and HUL.

Quick Ratio/Acid Test Ratio

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	1.59	1.287	0.769	0.901	0.514	1.0122
HUL	1.016	0.896	0.75	0.758	0.709	0.8258
DABOUR	1.015	0.981	0.907	1.127	1.241	1.0542

Quick Ratio measures the ability to use quick assets (cash, marketable securities, other than inventories all other current assets) easily converted into cash. Quick ratio 1:1 is acceptable.

In case of HU, quick ratio is not satisfactory, whereas ratio of Britannia and Dabur is acceptable.

Debt Equity Ratio

COMPANY	MAR-18	MAR-17	MAR-16	MAR-15	MAR-14	MEAN
BRITANNIA	0	0	0	0.016	0.033	0.0098
HUL	0.203	0.163	0.364	0.302	0.341	0.2746
DABOUR	0.08	0.09	0.03	0.03	0.04	0.054

Debt to equity ratio indicates the debts finance by the creditor to shareholders fund. A higher debt to equity ratio shows more funds are invested by creditors then shareholders. From the study, it can be said that debt ratio of HUL is higher compared to other two companies. Debt to equity ratio less than 1 can be said that a financially stable business.

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5. CONCLUSION

From the study of selected FMCG companies, it can be analysed that profitability of Dabur is higher compared to Britannia and HUL companies.

In the study of liquidity of companies, HUL is inefficient in payment of short-term debts compared to Dabur and Britannia. For debt to equity ratio, it can be stated that selected FMCG companies are financially stable in case of creditors to shareholders fund.

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GAMIFICATION: LEARNIG THROUGH GAME MECHANICS

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ABSTRACT
On a fine afternoon at my workplace, I was exhausted and would have been somnolent, any moment my workplace did give me the desire, ability or the motivation to work for an another second. I was feeling so torpid that I took out my mobile phone and was loading a game. Time passed by and I had an eureka moment my somnolent behavior to my work had vanished. I was flabbergasted by everything I was doing. The ghastly day had become a remarkable day my Interest in the job was increased tremendously. That was where the concept and idea of researched showed up. The Researchers had done the research on the above analysis as the process of Gamification helps in Management, SWOT Analysis and to fill the gap between the Education Institution and the Corporate necessities

Keywords: Gamification, HYPE Cycle, Behaviorism

GAMES GIVE US UNNECESSARY OBSTACLES THAT WE VOLUNTEER TO TACKLE - JANE MCGONIGAL, AMERICAN DESIGNER AND AUTHOR

INTRODUCTION
The term ‘Gamification’ was coined back in 2002 by Nick Pelling, a British-born computer programmer and inventor, and hit the mainstream thanks to Foursquare in 2009. By 2011, it officially became a buzzword when Gartner added it to its ‘Hype Cycle’ list.

Gamification is a modern way of teaching, which is used by companies. In this form of learning game mechanics are used to teach existing things to an employee mainly freshers, it motivates participation, engagement and loyalty. This can be used in almost every way, from your website to social media presence, day-to-day operations, customer engagement and more. Gamification introduces game design elements into non-game applications to make them more fun and engaging. It uses competition, points, achievement, rules of play, status and self-expression to encourage actions through positive feedback. Generally, the process involves taking a website, an enterprise application, an online community or an integrating game mechanics, the data-driven techniques that game designers use to engage players are having applications in the non-gamer experiences to motivate actions that add value directly or indirectly to the business.

GAMIFICATION IN REAL LIFE
- Gamification is the usage of game-thinking and game mechanics in non-game scenarios such as business environment and processes, specifically in recruitment, training and development, and motivation in order to engage users and solve problems, as defined by Gartner Group.
- According to a Gallup research released in April 2012, less than one in 10 employees are ‘engaged’ in their jobs. The remaining are ‘not engaged’ (60 %) or are ‘actively disengaged’ (32 %) - the most harmful form of disengagement. The objective is to take techniques from game design and implement them in non-game contexts, so that the overall experience for the employee or 'user' is more engaging.
- Marriott, Cognizant, Deloitte, Aetna, and many more organizations are using gaming concepts to improve workforce alignment, enhance employee skills, solve complicated issues and tap into new talent pools. Typical game design techniques consist of goal setting, competition, real-time feedback and rewards. There are also platforms such as e-Mee and Mind Tickle that facilitate Gamification in organizations.

GAME MECHANICS IN ACCORDANCE’S TO AGE OF EMPIRES
- The components of a game are called as game mechanics and one of the best examples in implementation is the game mechanics of Age of Empires.
- The game mechanics has helped in building up workman sprit in a positive way by making or inculcating the abilities of Transparency, Goals Badges, Levelling Up, Onboarding Competition Collaboration, Strategic Alliances, Fast Feedback.
- They are a plethora of workshops and modules of teaching the above qualities, but they do not have the same impact in learning in caparison to gamification.

ADVANTAGES OF GAMIFICATION USED TO INCRESASE EFFICACY

B.F. Skinner's Radical Behaviorism has claimed that human behavior is a result of the effects of environmental reinforcements and learning. A lot of Skinner's research on reinforcement and operant conditioning can be applied to understand motivation in gamification. Gamification if applied in an organized manner can act as an aperture between the companies and educational institutes it also saves a lot of time, energy and resources of the companies in the process.

Gamification in Recruitment & Selection Initiatives

- Marriott International Inc. was an early implementer to testing gamification in the recruiting process the right people. It developed a hotel-themed online game like Farmville or The Sims, to acclimatize prospective employees with the Marriott as an organization, the company culture and the hotel industry.
- Anil Garg, VP-HR, Whirlpool, stated during the recent TimesJobs.com boardroom conference that they have been significantly using social media and gamification (cryptic puzzles) to engage prospective employees to keep the brand connect alive.

Gamification in Training & Development

- The renowned Deloitte Leadership Academy, which has trained 10000+ executives from all over the world, delivers learning gamification through Badge Ville to increase knowledge sharing and brand development.
- TCS has also stepped in the world of gamification by implementing game engines that allow the creation of real-life environments with built-in networking features, enabling the development of such Massively Multiplayer Online Role-Playing Games (MMORPG).

Gamification in Engagement & Retention Strategies

- Accenture is using the gamification tools for employee engagement and workplace behavior modification.
- The World Bank's Evoke is a social collaboration game for solving social problems. A very promising area of engagement and retention where gamification can be implemented is employee wellness.
- Mind bloom's Life Game being utilized by Aetna, is a freemium online social game aimed at improving employee health and wellness by encouraging interactions with a metaphorical "self". Users can keep a check on their healthy by choosing and developing plans to foster wellness.

Gamification Based Decision-Making

- Quickly separating promising design concepts from the mediocre saves time and money and mediates destructive political gamesmanship
- Prediction-markets are speculative markets created with the purpose of making predictions. Evidence suggests that these markets are as good as or better than other methods at predicting events. In practice, the use of Prediction-markets, such as the odds from betting on presidential candidates, has been shown to predict the outcome of US presidential campaigns with an accuracy of seventy-five percent.

CONCLUSION

- The bottom line is millennials are highly technologically savvy. To keep them engaged, or applying for jobs, it's important to use a motivating strategy. Gamification can be "game-changer" companies are looking for.
- Knowing the users and identifying the mission are key to getting gamification right, as is understanding motivations vary according to the task, objective and player. Likewise, the gamification mechanics must suit the users.
- Thus, in choosing to implement a leaderboard, points system, relationship-based approach, badges, etc., you must ensure the mechanics to enhance the experience from the users'/players' viewpoints. Research on those "players" leads to creating personas to help understand likely player types.
- The design then requires measurement to monitor its effectiveness in bolstering user engagement. A successful project is one that covers both aspects of increasing engagement through pleasurable activity and satisfying the bigger picture – the original purpose for the design. Overall, gamification is an experience designers "weave" carefully into an existing system, not a feature they insert. Gamification is solution which is going to be successful for the generation of the current, it must be well designed, executed and maintained.
- The market for gamification is expected to grow significantly in the next coming years. The Gartner research indicated in 2015, 40% of organizations that deal with innovation processes will gamify those processes, and that by 2020 more than 70% of Global 2500 organizations will have at least one gamified application.

- The methods must be varied, and the information it provides must be used to improve not only your business, but the application itself. Gamification is not a panacea that will magically make everything better. But it has proven tools for improving the engagement level of employees and customers can also be fun and engaging.

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ROLE OF E-GOVERNANCE IN EDUCATION- ASSESSMENT OF SWAYAM

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ABSTRACT

Quality education is an indispensable part in development of a nation and growing young population calls for innovative and intelligent methods to impart education. E-Governance is generally understood as the use of Information and Communication Technology (ICT) at all the level of the Government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient efficient and transparent manner. E-governance has emerged as an efficient tool to make educational resources accessible to young population in India. E-Governance helps in improving transparency, providing fast information, dissemination, improving administrative efficiency and public services in different aspects of education. SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) is one of the many E- Governance initiatives of Government of India. Under SWAYAM, Massive Open Online Courses (MOOCs) are hosted on indigenous IT platform with an aim to provide quality education, covering various subjects being taught in different levels of education in the country using IT systems. SWAYAM aims to reach to even in the remotest corner of the country. Massive Open Online Courses (MOOCs) are online courses available for enrolment by students. MOOCs provide a flexible and affordable way to gain new skills, advance career and deliver quality education. In this paper an attempt has been made to discuss role of e-governance in education and its application by government of India under SWAYAM.

Keywords: E-Governance, Information and Communication Technology (ICT), Education, Massive Open Online Courses (MOOCs), SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds)

1: INTRODUCTION

E-Governance is essentially using of internet technology as a platform for exchanging information, providing services and transacting with citizens, businesses, and other arms of government. E-Governance provides a sound strategy to strengthen overall governance. It can not only improve accountability, transparency and efficiency of government processes, but also facilitate sustainable and inclusive growth. E-Governance also provides a mechanism of direct delivery of public services to the marginal segments of the society in the remotest corners, without having to deal with intermediaries. [1] Good governance has eight major characteristics I.e. Participation, Transparency, Effectiveness and efficiency, Responsiveness, Accountability, Equity and inclusiveness, This means e-Governance has all the above properties as well as innovative Information and communication Technology for the effective and efficient governance in any sector which assures that corruption is to be minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsible to the present and future needs of society.[2] However in developing countries like India, where literacy level is very low and most of the people are living below poverty line, it is very much difficult for the government to provide its services to such citizens via means of internet.[3]

1.1 CHALLENGES IN E-GOVERNANCE

Despite the successes and opportunities arising from the public sector’s use of ICTs in furthering the goals of resilient and sustainable societies, there are many challenges and risks that can undermine the role of e-government in supporting the Sustainable goals. Those include environmental stresses and disasters, socio-economic and governance risks, as well as those related to technologies themselves. Disturbances to political, economic and social systems are becoming more common, and often shift attention and resources away from the processes by which a society produces public, private and social goods and services. Delivery of public services is also disturbed, exposing millions to insecurity, loss of opportunity, and poverty. In the reverberation of those disturbances and stresses, public services may break down altogether, especially for the poor and vulnerable, women, children and elderly. [4]

A few major challenges are

1. Low IT literacy: Much of the Indian people are not literate and those who are literate, they do not have much knowledge about Information Technology (IT). Most of the people in India are not aware about the usage of Information Technology. So, in India, having such low level of IT literacy, how can e-Governance projects be implemented successfully? We can say that IT illiteracy is a major obstacle in implementation of e-

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Governance in India. So, first of all Indian people must be made aware about the usage of Information Technology.

2. User friendliness of government websites: Users of e-Governance applications are often non-expert users who may not be able to use the applications in a right manner. Such users need guidance to find the right way to perform their transactions. Therefore, government websites must be user friendly so that more and more people can use them easily. Hence, these websites can be more effective. If government websites will be designed in an easier format only then these will be more usable for the users who are not expert users of IT.

3. Local language: The acceptance of English language in India is very low. The e-governance applications are written in English. That is why e-Governance projects do not get success. Hence, the e-governance applications must be written in local language of the people so that they may be able to use and take advantage of these applications.

4. Services are not accessible easily: The concept of e-Governance is claiming for increased efficiency and effectiveness of the government, but these goals will be achieved only if the service will be available to the 100% of the citizens. So, every service should be accessible by anybody from anywhere and anytime. Even if the users of Internet are growing but still there is a major part of Indian population which is not able to access e-Governance activities for variety of reasons, e.g. some people may have limited access to Information and Communication Technologies and devices. Therefore, government has to provide internet access through public terminals as a part of their universal access efforts.

Other challenges include Confidence on technologies provided by government, scope of application, lack of awareness struggle to change etc. [3]

3.2 DEVELOPMENT IN E-GOVERNANCE IN INDIA

Continuous and persistent efforts by the government and other societal organisations have improved India's position on of implementation and acceptability of e governance in various sectors and services. UNITED NATIONS E-GOVERNMENT SURVEY is a survey conducted for assessment of e-governance development in member states using different indices. The EGDI (E-Governance Development Index) is based on a comprehensive Survey of the online presence of all 193 United Nations Member States, which assesses national websites and how e-government policies and strategies are applied in general and in specific sectors for delivery of essential services. Mathematically, the EGDI is a weighted average of three normalized scores on three most important dimensions of e-government, namely: (1) scope and quality of online services (Online Service Index, OSI), (2) development status of telecommunication infrastructure (Telecommunication Infrastructure Index, TII), and (3) inherent human capital (Human Capital Index, HCI). [5]

In 2018 India had an EPI of 0.9551[6]. The e-participation index (EPI) is derived as a supplementary index to the UN E-Government Survey. It extends the dimension of the Survey by focusing on the use of online services to facilitate provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes ("e-decision making"). [7]

Year	Rank	EGDI	OSI	TII	HCI
2018	96	0.5669	0.9514	0.2009	0.5484
2016	107	0.4638	0.7464	0.1430	0.5019
2014	118	0.3834	0.5433	0.1372	0.4698
2012	125	0.3829	0.5359	0.1102	0.5025
2010	119	0.3567	0.3683	0.0583	0.6433

Table-1: Development of E-governance in India [6]

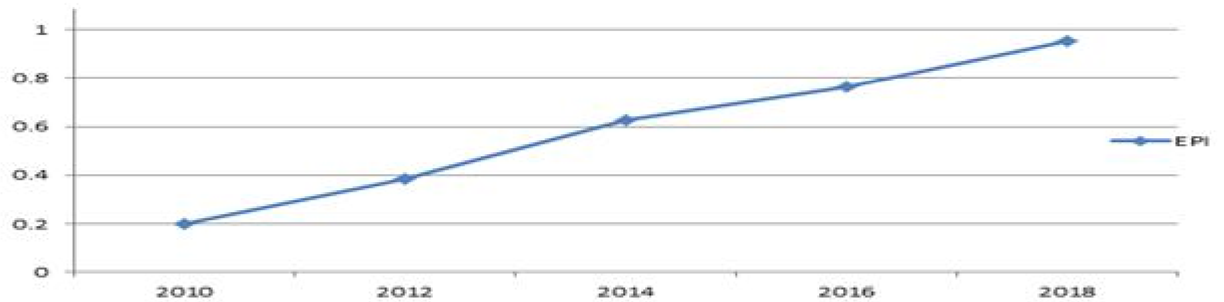

Chart-1: E-participation index v/s year [6]

2: E-GOVERNANCE IN EDUCATION

E-governance initiates several programs and policies which promote the usage of ICT in education. It predicts that there are many benefits for both the students, learner and the teachers, including the promotion of shared working space and resources, better access to information, the promotion of collaborative learning and radical new ways of teaching and learning. [8]

E governance also aids various aspects of educational administration like

1. Making all efforts and agencies work together in unison.
2. Assisting in the realization of the aims and objectives of education.
3. Providing service to society in its progress and that of the individuals.
4. Concerned with diverse human beings, the teachers, staff, students, parents and public, and coordinating of their.
5. Concerned with all those activities undertaken, and fullest utilization of resources, for education.
6. Its purpose through the procedure of organizing, ordering, facilitating and improving the efforts of people in the realization of the goals of education. [9]

There are more than 440 million internet users in India, and the number is expected to double by 2022. [10] Continuous innovations provide a way for implementation of e-governance in education.

2.1 E-Learning

E-Learning is the use of technology to enable people to learn anytime and anywhere. E-Learning can include training, the delivery of just-in-time information and guidance from experts. E-learning covers a wide set of applications and processes including computer-based learning, web-based learning, virtual classrooms and digital collaboration. The e-Learning System has powerful capabilities for managing courses and tailoring instructions to meet student needs. Electronic learning or e-learning is a type of education where the medium of instruction is computer technology. It involves planned teaching or teaching experiences that use a wide spectrum of technologies mainly the internet to reach learners at a distance. [9]

2.2 MOOCs: Massive Open Online Courses

This initiative makes available all types of educational courses and material for unlimited participation, often with free and open access for everyone connected to the Internet anywhere in the world. It also directly addresses the need for lifelong education and learning as well as the “up-skilling” of the labour force. The programme offers a flexible, wide-reaching and inexpensive way of meeting societies’ need for education of all types through democratizing access and providing, in principle, no limits on the numbers participating. [4]

Advantage of MOOCs [11]

1. MOOCs allow you to pursue your area of interest while doing job, studying or anything.
2. People from varied geographical background can come over and join MOOC without physical dislocation.
3. MOOC offers best of institutes, teachers without you even moving out from your home. Physical presence is not at all required.
4. MOOCs can be carried out during your free time. There is no time schedule regarding listening to or viewing video is allotted
5. MOOCs do not restrict the number of seats. It is massive in nature.
6. All you need is Internet connection and a PC/ mobile phone /tab and you can complete a course.
7. It is very beneficial for those for whom financial crisis hold them from undertaking education, this can be especially true for countries like India, Pakistan etc. where gender discrimination leads to lesser educated girls.
8. MOOCs are almost entirely free of cost unless and until you need a certificate.
9. MOOCs help gain people from corporate sector more efficiency and sharpen skills in required set of area.

Limitations of MOOCs [11]

1. MOOCs, being massive in nature fail to provide face to face or one to one interaction between a learner and an instructor.
2. MOOCs may not end up helping you earn a degree.

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3. MOOCs are self-motivated. The more you can push and keeps your desire lamp burning the better it would be.
4. MOOCs can never replace the need of classroom/traditional teaching.
5. MOOCs are not ideal for courses where labs are needed for experimentation.
6. MOOCs are hardly taken seriously by participants. The number of enrolments is always much higher as compared to number of completions. Dropout's rates are very high when it comes to MOOC.
7. MOOCs can never be that interactive as much as a classroom is.
8. MOOCs leave authentication a matter of choice for participants. Even authentication does not ensure it.

3. SWAYAM

SWAYAM is a programme initiated by Government of India and designed to achieve the three cardinal principles of Education Policy viz., access, equity and quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. The courses hosted on SWAYAM are in 4 quadrants – (1) video lecture, (2) specially prepared reading material that can be downloaded/printed (3) self-assessment tests through tests and quizzes and (4) an online discussion forum for clearing the doubts. Courses delivered through SWAYAM are available free of cost to the learners, however students wanting certifications shall be registered, shall be offered a certificate on successful completion of the course, with a little fee. At the end of each course, there will be an assessment of the student through proctored examination and the marks/grades secured in this exam could be transferred to the academic record of the students.SWAYAM platform is indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft and would be ultimately capable of hosting 2000 courses and 80000 hours of learning: covering school, under-graduate, post-graduate, engineering, law and other professional courses. [12]

A total of 335 courses are available on SWAYAM ranging from Engineering, science management , arts , language and others. However there is a need to develop more number of courses in non-technical fields.SWAYAM is dominated by courses in technical fields.

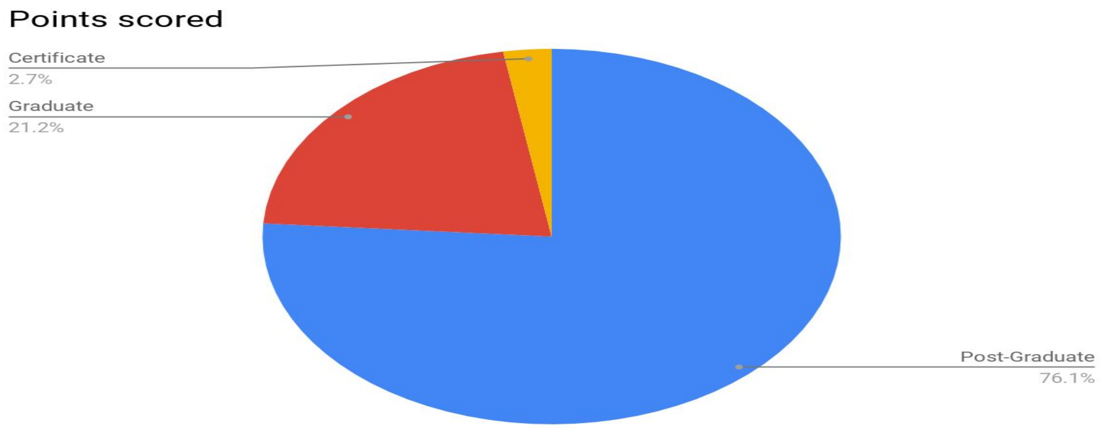

Chart-2: Distribution of courses on SWAYAM on basis of qualification

Majority of courses being in English create a problem for non-English speaking population in taking advantage of SWAYAM.

4. CONCLUSION

E-governance can play a vital role in dispensation of Government services to the people in a fair and efficient manner furthermore continuous efforts of the society and the Government, E-governance can reach the remotest corner of the country and benefit the people who have been largely untouched with regular and streamlined Government services. E-governance can play a crucial role in educational development of the population. Optimal utilisation of information and communication technology can not only facilitate direct learning through e-learning initiatives but can also help in other administrative requirements of educational institutions. Low IT literacy and dominance of particular languages like English are major challenges that need to be addressed. Various government initiatives have been operational regarding education through e-governance. SWAYAM is one such initiative where MOOCs are made available on a unified IT platform however low internet penetration and dominance of English emerge as major challenges.

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CAN WE REVISIT SCRIPTURES FOR ADDRESSING THE CHALLEGES OF CLIMATE CHANGE AND SUSTAINIBILITY?

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ABSTRACT

Education is an index of human development. It has always been considered as the instrument of social change. It is the most dynamic force in the life of an individual in influencing his physical, mental, emotional and social development. Our age old treasure of wisdom from scriptures inculcate such great values which needs to be a part of our education at all walks of our life. Education deals with ever growing man and ever growing society. Education provides both experiences to the individual and his adjustment to the environment. It is also a process which is individualistic as well as social in nature. Education is no more considered to be something which means hard labour. It is a joyous process. The attitude of happiness is essential in getting education. Educational process is dynamic in its nature. It brings about growth through learning and goal seeking. The word 'Education' originated from the Latin word which means 'to bring up' or 'to nourish'. Through education young people can and must be brought to realize their sacred obligation to uphold at all points the cause of universal peace, of world unity, and of co-operative fellowship within one's country and rest of the planet. The learning, then should transform us into channels of that Divinity endowed with the sense of decency and shame, of duty, of solidarity, of reciprocity and the very feeling of peacefulness, of joy and of hope. I feel the main aim of education is the transformation of a person from information to wisdom which is an elevated gift.

Keywords: Education, Scriptures, Values. Holistic, Development

INTRODUCTION

India has a long and glorious tradition of education and transmission of knowledge dating back to several millennia. Scholars and students form far and wide came to this country in pursuit of knowledge. Indian thinkers also have travelled far off lands to disseminate the profound philosophical thought emanated in this land. Thus internationalization of education is a part of our tradition and shall remain so far all times to come. There is a need for change in the perception and attitude of universities realizing that their field is wider, task is greater and goal is higher. Therefore, it is high time to mend and amend the systems.

Education is not just transmission of information. It represents the soul of the nation. It inseparably connected with the national ethos and identity. Education is also visualized as liberating and also as an evolutionary force, which enables the individual to rise from more materially to superior plans of intellectual and spiritual consciousness. Education is a dialogue between past, present and future. Education system of a country bears the distinct mark of its history, its social conditions and its value system. It cannot be equated with the products that can be bought and sold in the market place.

At present the entire world is passing through a very tensed and chaotic stage, even worse than what was experienced during two world wars. The present one is also a war, a war with difference. A war between good and evil, sacrifice and greed, virtues and vices, tolerance and rigidity, religious co-existence and fundamentalism. This stress is taking a toll on our health. Looking at the scenario, all over the world, it is imperative that we carry out introspection as to where we have gone wrong. To overcome the problems of this twenty first century, a paradigm shift from materialism and hedonism to spiritualism has become absolutely essential. The scientific and technological progress has provided man enormous comforts. But consumerism, materialism are the by-products of this process. However, man remains unsatisfied even after gaining so many comforts, his desires are never satisfied and they keep on increasing, resulting into consumerism.

Man therefore can acquire vast knowledge, following the scientific development, right conscience, perceptual phenomena and rational thinking through the teachings of Vedic Scriptures. Through this spiritual awakening, right thought, good conduct, reciprocal dealing can be cultivated, which always promotes the peace within and without. Thus we can understand how great is our need for a higher image of the human being and how practical is our traditional wisdom.

Bhagvadgita offers solution to all the problems that we face at every walk of our life. Most of the problems in our life can be tackled by taming or controlling our own mind. Bhagvadgita guides us as how to have the stable mind and be at peace. An attempt has been made to discuss the concept of wellness at holistic level and a larger platform in the interest of not only the mankind but also the vegetable and animal kingdom considering together. I feel, the peace of mind is the foundation for wellbeing. Hence the paper is divided into main three

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parts- The part-I discusses the need of taming the mind. Part- II speaks about the peaceful togetherness with the fellow beings and Part – III emphasizes the importance of ecological justice as an imperative for peace.

PART-I

An uncontrolled and polluted mind is the root cause of all kinds of unrest. The mind by nature is very unsteady, turbulent, tenacious and powerful and it is very difficult to control it but Lord Krisna in 'Bhagavad-Gita' has advised measures through which mental pollution can be avoided. These measures are two fold-practices of meditation and dispassion which means enjoyment of this very beautiful world with a sense of non-attachment. Through the principle of 'Niskama Karma' i.e. non-attachment, Bhagavad-Gita' guides us to perform our various duties effectively without any expectations of the fruits. Gita advocates renunciation in action. But for this non attachment the mind has to be poised, therefore taming, controlling the mind becomes an imperative. Bhagwad Gita teaches us the concepts of Dharma (Duty), Yajna, Sthitaprajna, Satya, Tapas, Dana. Thus by following the principles of Bhagavad-Gita, we can preserve and promote peace, order and harmony in the society and nature.

In the present society we observe that there is lack of peace and harmony in the society. And the characteristics of today's society have changed. Then what do we observe? – We observe the main problems today are:-

1 Lack of Peace

2 Deterioration of Values.

3 Shrinking of interpersonal relationships.

4 Exploitation of Nature.

All these problems are interrelated and if we try to search for the root cause of these problems, we reach to the main cause i.e. materialistic attitude and lack of control over our desires. When ‘I’ and ‘everything else’ are mutually exclusive entities, there is nothing wrong if I exploit everything else. This everything may be fellow human beings, as also the Mother Nature. Extravagant consumption has created a galaxy of problems at individual and social levels. The same craving for material consumption has intensified environmental crisis also. Therefore it is very important to control our mind. In the present paper the emphasis is made upon the importance of teachings of our scriptures for taming the mind. And how these teachings will lead us to promote and preserve peace, and sustainability in our society and nature.

Today in the world of scientific and technological development, unending competition, humankind is facing mainly two alarming problems i.e. lack of peace of mind and a threat to sustainable development. But if we try to search of the cause, it’s the materialistic attitude of human beings. Today the values are deteriorating in the society. The human mind is occupied with all selfish desires, lust, passions etc. The constant flying of an individual's thoughts towards objects of gratification is called desire and when the steady flow of these thoughts of aggrandizement and possession are deflected by some obstacle, the refracted thoughts are called anger. When disappointed in desire gratification, a storm of revolt rises in the mind, as a consequence of which anger soar up to loss, wreck and sink the boat of life.

In Bhagavad-Gita Lord Krishna explains this state of mind in Chapter II while contemplating the objects of the senses, a person develops attachment for them, and from such attachment, lust develops and from lust anger arises. From anger complete delusion arises and from delusion bewilderment of memory. When memory is bewildered, intelligence is lost. And when intelligence is lost one falls down again into the material pool.

This is the state of mind that today's individual faces at every stage of life. This is the state due to anger, bewilderment of memory and loss of intelligence, in which the individual is like to take hasty decisions. Most of the times, these decisions are irrational and egocentric. This is what exactly happens today, a person who is suffering from lot of stress, frustration, depression in his day to day life, his decisions go wrong and we have the cases of suicide, which is totally an irrational decision. It is because the person losses the power of discrimination.

One must face and go along with the current of whatever happens in life. The keyword is "Endurance". The life has to be sustained through pleasure and pain, victory and defeat, success or failure, joy or sorrow, honour or dishonour, health and disease, wealth and poverty and other ups and downs alike, in a spirit of equal mindedness. Life shall then be at peace and purposeful.

Bhagavad-Gita teaches us how to acquire this self-control. While dealing with pleasurable and painful situations in our life. According to Gita the ultimate solution to face the adverse situations in life is nothing but- "Learn to Endure" – We must therefore, learn how to face these situations with calm and composure and bear

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them with serenity of mind, knowing that these situations bound to pass away. In Bhagavad Gita Lord Krishna advices that every one of us should perform our duties without considering happiness or distress, loss or gain, victory or defeat and by doing so we shall never incur sin. He who acts for his own sense gratification either in goodness or in passion, is subject to the reaction good or bad. Today our successful advances however has not developed a technique to control the mind. Thus to control one's mind becomes an imperative. It is therefore to control our desires. Even if one's desire is fulfilled, an insatiable thirst for more and more joy holds the individual and this endless appetite ruins the mental strength. And it results into greed. Greed is a sense of dissatisfaction constantly pursuing and poisoning the sense of satisfaction that we have already experienced. In an undisciplined man there can be no satisfaction at any time. Due to this as his mind is completely occupied with anger and greed he forgets and neglects his duties. And it leads to materialism, consumerism and deterioration of values. Interpersonal relations get affected. It also results in exploitation at social and environmental level.

PART-II

The vedic sense of Yajna or its original meaning is well represented in the Bhagavad-Gita in which it is not seen as a ritual act. An act done as an offering to God is Yajna and culminates in the realization that the life of man is itself a Yajna. As expressed in Bhgvad-Gita, the act of offering, the person who offers and the deity to whom it is offered, Agni into which the offering, is made as well as the object of its attainment are all Brahman' The vedic yajna is here interpreted in a larger, spiritual way. The idea is present in Ṛgveda when it is said that one should act with havismata manasa or with a sense of (offering) is Yajna.

The law of world is sacrifice and he who violates it, cannot obtain mastery either here or beyond. To worship divine is to work for divine. It is through yajna, the sages carried the message of Vedas to all the quarters of the world. This they tried to bring about moral and spiritual upliftment of the people at large. Yajna is also a 'dána'. This word also indicates an act of giving away which belongs to oneself. The concept of Lokasamgraha in Bahagvadgita means the wellbeing off all. Only a person, having selfless attitude can work for others, and can perform this type of yajna in his life. We have to perform yajna with the mind as much as with the body. Therefore, the underlying idea is that actions performed for the good or service of others is the forms of 'yajna', will be acceptable to everyone and will be significant irrespective of time or period. A wooden stick on entering a blazing fire takes up the form of fire. This sort of merging induces total transformation of man's inner personality. In fact many a times even the external appearance, form changes. The merging of world humanity with world consciousness takes the form of generosity and supreme greatness.

In our culturally pluralistic society education should foster eternal and universal values, oriented towards the unity and integration of our people. It should bring about desired emotional equilibrium and psychological balance among the young as well as the citizens of the country through various cur4ricular programmes both at formal and non-formal level. The coming generations should have the ability to internalize new idea constantly and creatively. They have to be imbibed with a strong commitment to humane values and to social justice. Thus our religious, moral and ethical values must be the inspiration for the emerging would. We must listen to the signs of the times and respond creatively. We cannot accept globalization unquestioningly.

The principle of emotional and inter cultural integration in education aims at infusing complete unity among younger people, through our system of education. For this, our education should inculcate national and human values forming attitudes of respect for the nation culture, national history, tradition and language together with the sense of honor for national anthem. Education is a powerful medium to achieve the high ideal of inter cultural understanding. Such understanding can bring a cultural synthesis. Teacher plays a very vital role in promoting the inter-cultural understanding. Thus education has a role. It refines sensitiveness and contributes to national cohesion a scientific temper, independence of mind and spirit. Thus furthering the goals of socialism, secularism and democracy enshrined in our constitution.

PART-III

Through its teachings, Bhagavad-Gita proclaims equal membership of nature to all living organisms on the earth. Environmental downfall is a burning problem of this age. Ecological crisis we are facing today is perhaps, one of the worst crises in history. Man, in his attempts to get mastery over nature, has destroyed it. The solution to the problem will come from man himself and not from science and technology. Teachings of Bhagavad-Gita, therefore, in preservation of nature, ecological harmony and environmental protection are significant. Though it is necessary to have a general legislation for environmental protection, environmental laws will not help much. Individuals by self-discipline and practice can only bring changes. Education for sustainable development may well be enriched by Eastern religious and cultural perspectives. We have to have new way of looking at the Universe which emphasis the satisfaction of the basic needs and a balanced lifestyle,

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rather than the pseudo-desires of modern consumerism, along with the thriftiness in the use of natural resources and long-term global values.

Relating to these views, Dunlap, Olsen and Lodwick conducted an empirical study, emphasising that the entrenched conventions which propel us to lead environmentally unsound lifestyles may be described as ‘thinking disorders’. They mention some of the ingredients work together to generate a specific type of thinking about once engagement with the environment as follows:

a. Humans can control the nature and use it to their advantage.

b. The natural environment is valuable because it provides necessary resources.

c. Natural resources are ample for human needs.

d. Unlimited economic growth and progress is possible.

e. Technology can solve most human problems.

Progress in arts and sciences have made development an ongoing process, and each artifact and each invention thrives on stealing something from the nature and stealing as legally defined is both wrongful gain to man and wrongful loss to nature. Bhagavad-Gita has another way to define stealing in contradiction to moral parameters, particularly in the environmental context. The Gita says, the one who enjoys the gifts of nature without giving anything in return to nature, is undoubtedly a thief, and unilaterally taking from nature without giving anything in return to it is a sanctuary of theft and desperado. We as humans should not take nature for granted. We expect nature to provide everything to fulfill our purposes. But we tend to overlook what our duties are towards nature to protect its harmony. Therefore, the mankind has to live in tune with the nature if life has to be peaceful, happy and satisfied. In the nature of scientific developments, man started distancing himself from nature and even developed an urge to conquer nature. Ancient wisdom had recognised that nature was not subsumable and therefore had made it an obligation for man to surrender to nature and live in tune with it.

No peace and stability on the earth is possible until and unless man mentally develops an attitude for the welfare of all beings. “Respect for rights of others is a bases for peace”. This is only when man applies the principles of science and technology with an ethical frame of mind and making the use of these advances for bio diversity conservation. It is due to plants that life on earth till date exists and the ecosystem is being held. In the path of knowledge, one has to determine the factors responsible for the loss of biodiversity and about those plants and animals which are facing extinction. In the path of action, the practical aspects are required to be taken into consideration and to evolve and implement such methods for the restoration of the threatened plant and animal species. And the effort should be towards the preservation of biodiversity.

The balanced approach of Bhagavad-Gita therefore is the one which sets forth a way of life and a view of reality, acceptable to us all, who are the students of reason and science. We may realize the interconnectedness of all the creatures, lead our life with eco-friendly attitude, show concern for our environment and this way imbibe or inculcate this ‘Greener-aspect’ in our life. ‘The state shall endeavor to protect and improve the environment and safeguard the forests and wild-life of the country.’ By the same amendment is created a fundamental duty of every citizen under Article 51- A(g): “to protect and improve the natural environment including forests, lakes, rivers and wildlife, and have compassion for living creatures”.

The expansion of human activity is destroying habitats and causing the extinction of plant and causing the extinction of plant and animal species at an accelerating rate. This is probably the most serious of all ecological problems. The most serious environmental concern of all is that we are damaging the biological processes that provide and renew the conditions all life on earth needs, such as an appropriate climate and a constant supply of nutrients.

Gandhiji wrote in a simple word that may be the perfect statement of environmental conservation- “Nature produces enough to meet the needs of all the people but not enough to satisfy the greed of everyone.” Barely two weeks before his death in January 1948, Gandhi made the rather prophetic statement, that “This modern civilisation is such that one has only to be patient, and it will be self-destroyed”. According to him, simple life style, voluntary poverty, minimizing needs and proper understanding of the relationship between ‘Man and Nature’ and its different aspects can save us from future holocaust. He regarded human senses to be controlled. Inclination to human senses leads to desire. Lust to satisfy desire, becomes insatiable. If desire is thwarted, one becomes angry and mad. He in the process, loses his memory, behaves in a disorderly manner and comes to an ignoble end.

Bhagvadgita's all chapters are the ready reckoners for the variety of problems that we face today at individual, social and ecological level. It enhances one's Emotional and Spiritual Intelligence. These teachings are all inclusive, Universal and eternal. At the end of the day we need peace of mind and Bhagavad-Gita offers guidance for this holistic wellbeing. It is an imperative to go back to these age old teachings of Bhagvadgita which is not just the religious book but offers vide range of ways to live our life in order, peace, unity , harmony and solidarity. The realistic and feasible way to, lead a righteous life, meeting with social and ecological justice. Such life would head towards the real happiness, the inner bliss. My submission therefore is the teachings of Bhagavad-Gita to be inculcated by children and youth today. The teachings are Universal and eternal.

CONCLUSION

Education has, no doubt, a crucial role from the point of view of economic development. But it has a far more profound and wider role to play in terms of protecting the culture, intellectual independence and the values of the civil society. An understanding of part of culture and of democratic values among other things is a part of education and these elements cannot be subsumed in some global market place. Education in our country has a social perspective. It is looked upon as the most potent means of national and social development. Thus the objectives of our educational system must be based on values such as equality, social justice, emotional integration, humanity etc. Education system should strive to promote equality and social justice and to reduce social and cultural differences trough diffusion of education. It is necessary to foster in the teachers and students and through them in the society generally the attitudes and values needed for developing the 'good life' in individuals and society.

Today's education caters the needs of 3 'C's, but the forth 'C' shall result into the holistic development of the student which is the need of the hour: - If there is no 'C'uriosity, Science cannot advance, without 'C'reativity, Technology cannot provide innovations, Without 'C'ompetition progress is stagnated but if there is no 'C'OMPASSION, all the three above shall get destroyed. Education should foster such cardinal virtues to make the human life more meaningful. Our education system needs to have an interdisciplinary design to justify the real purpose of Education. Thus a model can be developed to implement the time tested values which will become an integral part of educational system for the holistic development of an individual thereby by justifying the purpose of education. : The journey form information to knowledge and from knowledge to wisdom.

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