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IIHS

Indirapuram Institute Of Higher Studies

National Conference

on

MANAGING DIVERSITY IN BUSINESS THROUGH SOCIAL & DIGITAL MEDIA

Organized by
Indirapuram Institute Of Higher Studies
Indirapuram

February 9, 2019



In Association with
Indian Academicians and Researchers Association (IARA)
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Indirapuram Institute Of Higher Studies Indirapuram

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Indirapuram Institute of Higher Studies, a unit of Tapindu Educational Society, Indirapuram and Radiant Group of Institutions, is a premier institute in Delhi NCR. IIHS belongs to a pool of ten institutions which encompasses a wide network of educational institutes comprising of Residential and Non-Residential School, Degree colleges affiliated to the respective universities and management boards in India.

Since its inception, IIHS has evolved into a great intellectual, cultural and educational movement earning a reputation for academic excellence in providing real time and quality education. IIHS NCR campus offers post graduate and under graduate management programmes, which are value driven and rigorous. The professionally oriented programmes offered by IIHS are designed to train the students to become well versed and accelerated in their fields of choice.

IIHS stands for development and innovation of management science in all its perspectives and strives consistently to become the center of excellence in management education. With an established reputation as providers of management and professional education in northern India, and having experience in training people to enter a range of professions ranging from accountancy, IT, operations, finance, marketing, human resources, services and continuing professional development, IIHS is one of the most appropriate choices for the young Indian student.

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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.

ABOUT THE CONFERENCE

National conference provides an opportunity to encourage National and International communication & collaboration which help in disseminating knowledge, share experiences and enhance research aptitude among the researchers in multidisciplinary areas. Present conference aims at managing diversity in various business domains through different digital and electronic platforms to understand the innovative and the best practices involved in the field of Management, Information Technology, Human Resource , Marketing , Finance & Mass Media.

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PREFACE

Dear Distinguished Delegates, colleagues and guests, Indirapuram Institute of Higher Studies is organizing a National Conference on “**Managing Diversity in Business through Social & Digital Media**” on Saturday, **February 9, 2019**. The conference aims at bringing together academicians and professionals working in various organizations at one common platform in order to present their innovative ideas and edge of work.

Creation and dissemination of knowledge through research is an integral part of management education. Research is the systematic and objective process of gathering, recording and analyzing data for taking appropriate decision. With the increasing trend in digital and electronic media the business organizations are depending more on the research findings in different areas of management for arriving at timely and valuable decisions.

The conference has solicited and gathered technical research submissions related to all aspects of major conference themes and tracks. This proceeding records the fully reviewed papers. All the submitted papers in the proceedings have been reviewed by the reviewers drawn from the advisory committee, external reviewers and editorial members depending on the subject matter of the paper. And the readers will find the inputs valuable and enriching.

I would like to sincerely acknowledge the contributions made by the learned authors and thanks the readers for their interest. We look forward to the valuable suggestions from the readers for improving the quality of the articles.

I would also like to sincerely thank and show my gratitude to the chief patron Smt. Meena Singh, patrons Shri. Vishal Singh and Smt. Shalini Singh and Conference Director Prof Dr. Sharad K.Goel for their continuous support and guidance. Lastly, I am grateful to all those who have contributed directly and indirectly for the completion of this event, and hope that all participants and other interested readers benefits from this proceedings and also find it stimulating in the quest of achieving greater heights.

With warm regards.

Dr. Sonal Kapoor
Convener, NCMDBTSDM - 2019
Indirapuram Institute of Higher Studies
Indirapuram, Ghaziabad

MESSAGES

From Pro Vice Chancellor Desk

Chaudhary Charan Singh University, Meerut



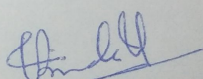
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Message

It is a matter of great pleasure that the Indirapuram Institute of Higher Studies, Ghaziabad, affiliated to Chaudhary Charan Singh University, Meerut, is organizing 3rd National Conference on "Managing diversity in business through social and digital media" on February 09, 2019. The Theme itself speaks volumes about the sensitiveness towards current, much desired, issues which need detailed discussion on such an open platform.

I congratulate the institute for selection of an appropriate topic for the conference and for providing good exposure to the students and faculty with the current trends of the corporate and business world.

With best wishes for the success of the national conference


(Prof. Y. Vimala)
Pro Vice Chancellor

Principal,
Indirapuram Institute of Higher Studies,
Ghaziabad.



From Patron Desk

I want to congratulate IIHS for creating an important platform to promote academic excellence in management education and research. The academic conference will surely stimulate quality and innovation in teaching and learning of management and make it more relevant and productive in today competitive world.

The focus of the conference is on “**Managing Diversity in Business through Social & Digital Media**” in the era of disruption and the future of organization is extremely significant in these times. Digital technologies are turning everything into data which is being processed at a fast pace for industrial use. This is, eventually changing the way of thinking and the way of doing business. Managing these diversities is universal challenge and every enterprise must re-imagine the organization in order to have a future. The power of new ideas will have significant impact on industry and management, and it is best to research and debate its impact today, since the pace of change is more rapid resulting increased diversities. Hence quicker response is essential.

I am hopeful that today’s National Conference will provide a common platform to all participants to discuss and deliberate the way forward on a wide range of issues related to the accessibility, usability, relevance and effectiveness of Management Education.

I wish a successful and highly beneficial conference for all the participants!!

Vishal Singh
Managing Director
Tapindu Educational Society



From Director Desk

Diversity in business brought about by improved technologies and innovation is constantly changing the global economic scenario. On one hand, it is taking the world at pinnacle of development but on the other hand posing a big challenge as how these diversities are to be managed.

The need of the hour is to have constant deliberation of these issues on some common platform where the likeminded people and experts may discuss, debate and eventually come out with some fruitful solutions which may benefit the academia and the industry as well. The National Conference on **“Managing Diversity in Business through Social & Digital Media”** is a special initiative in this direction. I am happy that distinguished speakers from industry and academia will deliberate on the future of organization, leadership, business models and value change arising out of using digital media in industry processes.

The team of IIHS is fully geared up to realize the potential in the areas of different managerial disciplines. The presentation of research papers by researchers will provide new insights and ideas where as the plenary talk will definitely showcase a new scenario of knowledge associated with the agenda and will benefit all participants and stakeholders.

I welcome all delegates and participants on this conference and hope they will benefit extensively with new knowledge and ideas for managing diversity through digital processes.

With lots of good wishes.

Prof. (Dr.) Sharad K. Goel

Director

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COMMUNICATION STRATEGIES AND MARKETING PERFORMANCE

J. GayathriAssistant Professor, Institute of Engineering and Technology, Coimbatore

ABSTRACT

Communication and its vital function to facilitate teamwork and knowledge management are at the centre to manage teamwork and integration in all functions and business partners. This understanding is necessary to improve the development of new products and services and improve marketing efficiency. The research framework of Mohr and Nevin (1990) provides an attractive model, which links channel performance, to achieve such improvements. The research and the hypotheses use the unique framework of Mohr and Nevin to examine the impact of the communication strategy on intra-organizational multifunctional teams on the results of their teams. The researcher has collected data from 42 organisational teams (237 respondents) and found that the model transfers well to the intra-organizational context. The findings supported the relationship between the team's communication behaviours and team performance. Also, the researcher found significant differences in this relationship depending on the nature of the offer created by the Department (tangible product or intangible service) examined.

Keywords: Cohesion, team dynamics, productivity, profitability, communication

INTRODUCTION

For many companies, organisational knowledge is tacit. Tacit knowledge is stored in the memory and experience of individuals within the company and tends to remain incorporeal. This entails difficulties in its codification, which means that tacit knowledge is not available to be disseminated or emulated on a broader scale (Demarest 1997), and it is difficult to transfer between the constituents of the organisation (Grant and Gregory 1997). A multifunctional collaboration is needed to achieve its objectives. In response to this difficulty, many organisations use task-based teams to achieve the direct participation of individual specialists such as vendors. Therefore, there has been considerable interest in empirical research that explores the approaches to manage and integrate these teams in order to ensure the successful development of new products and services (Srivastava, Shervani and Fahey 1999). Communication and its vital role in facilitating teamwork and knowledge management have been at the centre of such research (Hoegl and Gemuenden 2001), but the communication process has been a neglected area of study. In addressing this negligence, this research investigates the communication behaviour of the project teams involved in the creation of new products and services and relates it to the performance of these teams.

The issue of teamwork within the learning organization team-working has tended to receive more attention from academics of organisational behaviour than from marketing specialists. However, the marketing interest in the communications of the organisation is now being driven by the growing importance of cross-functional teamwork in many marketing activities, as it is considered a pivotal part to achieve links and institutionalise feedback. In this study, The researcher applies a well-known conceptual model of channel management literature, the framework of Mohr and Nevin, to the relationships between teams within the organisation. The fact that Mohr and Nevin's framework places communication behaviour at the heart of marketing channel performance makes it a particularly useful model to apply to the dynamics of inter-organisational teams.

THE FRAME OF MOHR AND NEVIN

Mohr and Nevin (1990) They applied what they called a "consonance approach" that sought to relate channel conditions and communication with channel results, and the model they subsequently developed is unique in this regard. They assumed that the communication strategy interacts with a given channel condition to determine the levels of channel results. In examining this relationship between the communication strategy and the channel conditions on the performance results, they suggested that the existing channel literature supported a two-phase process. First, the conditions of the channel and the communication strategy would influence the qualitative results. Second, qualitative results would influence quantitative results. Their results indicated that more collaborative communication strategies could have a disproportionately positive effect in less healthy conditions (such as high integration and control). Thus, the match between channel conditions and communication strategies may not be as they initially expected.

In this article, The hypotheses utilise Mohr and Nevin's (1990) framework as a basis to examine the impact of communication strategy in intra-organisational cross-functional teams upon team outcomes. In doing so, the researcher hope to examine in depth the relationship between communication, relational context and conditions, and the resulting outcomes on team performance.

THE RESEARCH CONSTRUCTS AND MODEL

The conceptual model for our research is presented below.



In this article, the hypotheses as a basis to examine the impact of the communication strategy on intra-organizational multifunctional teams on the team's results. In doing so, the researcher hope to examine in depth the relationship between communication, context and relational conditions and the resulting results in team performance.

By conceptualising the qualitative results of team performance (coordination and integration), the researcher focus on two elements. These are the perceived level of team openness (Openness) that is related to the level of integration achieved by the team members, and the coordination and alignment of objectives (Coordination). Research has shown that cooperative goals, as opposed to competitive or independent ones, contribute to an open and constructive discussion of differences with co-workers (Tjosvold, Meredith and Wellwood 1993) found that cooperative interactions facilitated quantitative results, such as completion of the task (i.e., effectiveness), efficiency and confidence in future collaboration. This suggests that performance results, such as productivity and quality improvement, are likely to be realised under conditions of greater coordination and congruence of objectives. This leads to the first of our two hypotheses linking qualitative and quantitative results:

H1a: The quantitative results (for example, quality, productivity and profitability) are improved when the teams have greater coordination and alignment of objectives.

The improved quality of the products or services, instead of acting as a guide for the activities of the organisation, is, in fact, a natural result of the constant emphasis on the needs of the clients (Lukas and Campaign, 1996). This emphasis also requires a high degree of collaboration and openness among internal clients to align internal processes and the development of products and services, so that it serves external customers profitably and strengthens competitive advantage. In relation to openness among team members, three frequently cited characteristics of mature and stable relationships are: (1) the degree of self-disclosure, (2) the degree and wealth of knowledge that each partner has of another, and (3) the ability to predict and anticipate the reactions and responses of each one (Gabarro 1987). These mature and stable relationships minimise interdepartmental conflict and promote collaboration that in turn facilitates further product development and product management performance.

H1b: Quantitative outcomes (e.g., quality, productivity, and profitability) are enhanced when teams have greater openness.

TEAM COHESION

The cohesion variable at the team level is defined as the general attractiveness of a team for all its members (Fulk 1993). The two dimensions developed by Chin, Salisbury and Gopal (1996) to measure the cohesion of the team: (1) belonging and (2) moral they are useful measures of team cohesion in the sense that both depend on the perception of the individual in relation to the membership of his team, as opposed to the possible results of the cohesion of the team, as a more cooperative behaviour. Team cohesion and participation has been related to team innovations (Agrell and Gustafson 1994) and has often been considered a predictor of team performance and a mediator of team training, maintenance and productivity. This leads to our hypothesis that establishes the relationship between the cohesion of the team and the qualitative results:

H2: A greater cohesion of the team improves the qualitative results.

COMMUNICATION STRATEGY

Collaborative communication strategies would have a higher frequency of communication, a more reciprocal (or bidirectional) communication, a more natural modality and more content of indirect messages. In contrast, autonomous communication strategies would exhibit a lower frequency of communication, more unidirectionality, a more formal modality and a more direct message content. The researcher have used these four dimensions of communication behaviour and relate them to more collaborative or autonomous

communication strategies since team communication researchers also cite them as appropriate. Indirect communication strategies are more likely to be used when network members want to nurture a supportive atmosphere, where they are designed to change beliefs and attitudes about the appropriateness of the desired behaviour. Given that the communication strategy adopted by the teams can have an essential and direct effect on the cohesion of the team, the next hypothesis refers to the relationship between the communication strategy and the team's cohesion:

H3: The cohesion of a team will be higher when the team has a more collaborative communication strategy.

These research hypotheses are shown in the research model proposed in Figure 1. In it, the researcher highlight the relationships between qualitative and quantitative results (H1a and H1b), the relationship between cohesion and qualitative results (H2), and finally, the relationship between Communication Strategy and Cohesion (H3).

QUANTITATIVE RESULTS OF INTRAORGANIZATIONAL TEAMS

When looking at the data, The researcher found that among the industries there was a significant ANOVA result for both Quality ($t = 3.36$, $p = .001$) and Profitability ($t = 2.42$, $p = .016$; see Table 4 of the Appendix), but Not for Productivity. There is a relatively large gap in quality perceptions, as The Department 1 teams feel that customers have higher quality perceptions of their products than The Department 2. Also, The Department 1 teams are in a slightly larger agreement (greater consensus, as evidenced by the lower standard deviation) on the quality perceptions of its clients. For profitability, the researcher see a significantly higher average for The Department 1 and a higher standard deviation for The Department 2.

The first two hypotheses about the research model referred to the relationship between quantitative and qualitative results. The researcher have examined the relationship between these Quantitative and qualitative results by performing the correlation procedure of the Pearson Product Moment. To assume a linear (as opposed to a curvilinear) relationship between the variables in the correlation, bivariate scatter plots were examined before correlation. In each case, linearity can be assumed.

Table-1: Correlations

	Quality	Productivity	Profitability	Coordination	Openness	Cohesion
Quality	-	0.48	0.58	0.48	0.39	0.48
Productivity	0.47	-	0.45	0.66	0.58	0.73
Profitability	0.58	0.45	-	0.43	0.4	0.43
Coordination	0.49	0.65	0.44	-	0.59	0.63
Openness	0.42	0.57	0.41	0.61	-	0.62
Cohesion	0.48	0.72	0.43	0.62	0.61	-

$p < .01$ two-tailed

There is a statistically significant, positive and moderate correlation (between .3 and .7) among all quantitative and qualitative results measures. The researcher can see that coordination is positively related to the three quantitative results (profitability, productivity and perceived quality), as well as openness. This provides initial support for our hypotheses H1a and H1b. Also, all these variables (except for Productivity) were statistically different at the Department level and, therefore, the researcher can see the respective correlations of these relationships to examine any differences between the two.

Table-2: Correlations Outcomes

	Quality	Productivity	Profitability	Coordination	Openness	Cohesion
Quality	-	0.45	0.65	0.37	0.35	0.44
Productivity	0.5	-	0.44	0.63	0.63	0.7
Profitability	0.46	0.47	-	0.38	0.43	0.42
Coordination	0.61	0.69	0.47	-	0.61	0.59
Openness	0.46	0.53	0.33	0.57	-	0.66
Cohesion	0.54	0.74	0.45	0.68	0.59	-

$p < .01$ two-tailed

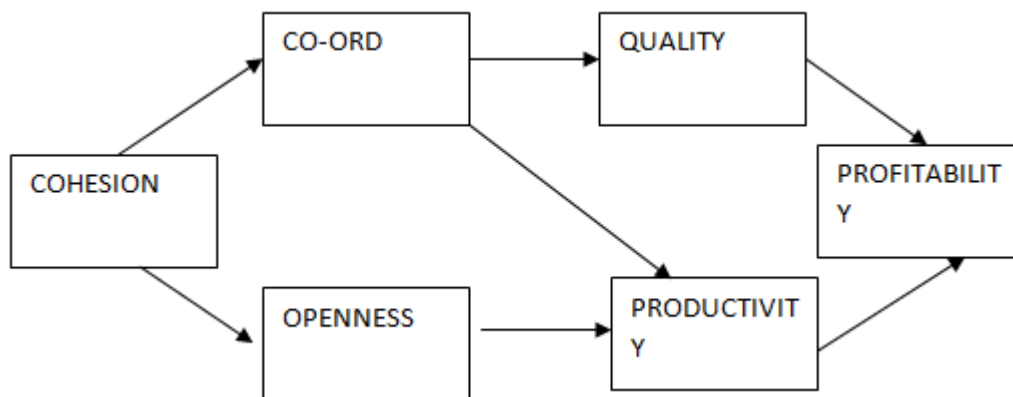
When comparing the two industries, the correlations between: Quality / Productivity; Quality / Coordination; Quality / Opening; Productivity / Profitability; Productivity / Coordination; and profitability / coordination were greater for The Department 1. In contrast, the correlations between: quality / profitability; Productivity / openness; Profitability / Opening and Coordination / Opening were greater for The Department 2.

TEAM COHESION

When looking at the data for the Cohesion team, the researcher found that there was no statistically significant difference between the two industries. As the researcher see in Table 1, there is a significant and moderate (.3 to .7) or secure (above .7) correlation between all the quantitative and qualitative results measures and the cohesion of the team, and productivity has a correlation particularly strong. As you can see, the cohesion of the team correlates with all the results and therefore would be a powerful determinant of the effectiveness and profitability of the team.

Hypothesis 2: The relationship between qualitative results and cohesion

The second of our hypotheses refers to the relationship between team cohesion and qualitative results (H2: qualitative results are reinforced by greater team cohesion). The researcher have already gained support for this hypothesis from the correlations shown in Table 1 between Cohesion, Coordination and Openness. Figure 2 shows the regression pathways between the variables. The standardized regression coefficients (Beta) are also shown for each relation (ie, $R = .xx$). This route analysis provides more detailed information about our hypotheses. The statistics for the analysis of the path between the cohesion of the team and the results are found in Table 5 of the Appendix.



When examining direct relationships, the researcher find that in the first instance there is a direct relationship between the three quantitative results (Profitability, Productivity and Quality), with relationships R1 and R2 show the impact on corporate perceptions of the team's profitability of perceived quality by the customer and the productivity of the team. Then the researcher see that productivity is positively influenced directly by coordination (R4) and openness (R5). Then, the quality is positively influenced by the coordination (R3), but not by the opening. This provides strong support for the H1a hypothesis and partially supports H1b.

Although there is no direct relationship between Coordination and Profitability, there are indirect connections through the other quantitative variables. The routes R3-R1 and R4-R2 show an intervention relationship where the influence of the ordering on profitability is an indirect effect, mediated by Quality and Productivity, respectively. These indirect effects and correlation coefficients provide additional support for the H1a hypothesis. When examining the other qualitative result, there was no direct relationship between Openness and Quality or between Openness and Profitability. Although there is a correlation between openness and the three quantitative results, there is no direct or causal relationship with two of them. Taking into account that each of these constructions was statistically different between the two industries, the researcher compared the results of the regression in general with those of each industry.

Table-3: Regressions Coefficients for Relationships between Variables

	R1	R2	R3	R4	R5
Whole Sample	0.4	0.34	0.44	0.39	0.43
Industry 1 (Manufacturing/ NPD)	0.52	0.71	0.67	0.55	0.54
Industry 2 (Service / Consulting)	0.63	0.44	0.53	0.8	0.84

The relationship between perceived quality and perceived profitability (R1) is stronger for The Department 2, as is the relationship between coordination and productivity (R4) and the relationship between openness and productivity (R5). Those in the consulting The Department had stronger hypothetical links between the constructs, except linking the increase in productivity with a better perception of profitability (R2), and greater coordination to improve the perception of the quality of the offer (R3) of the client. Looking further, the researcher found that relationships R6 and R7 showed the impact of team cohesion and a positive atmosphere

within the team in their ability to be open and share information and to coordinate their work and share common goals. This provides strong support for the H2. In general, these results also support the "two-step" model proposed by Mohr and Nevin (1990) in which team cohesion will first influence qualitative results, and these will in turn influence quantitative results.

COMMUNICATION STRATEGY

The communication strategy can influence their perception of team cohesion. When observing the data for the frequency of communication and the mode of communication (formality), the researcher found that among the industries there was no significant ANOVA result for formal or informal communication measures. When observing the data for the direction of the communication, the researcher found that there was a significant ANOVA result among the industries for bidirectionality. Again, the researcher see a significant variation in communication patterns between the two industries, with The Department 2 exhibiting significantly denser and more bidirectional communication within its teams than Industry1. For the content of the Message, the researcher found that there was a significant ANOVA result between the two industries represented in Table 4.

Table-4

	R9	R11
Whole Sample	0.22	0.31
Industry 1 (Manufacturing/ NPD)	0.2	0.25
Industry 2 (Service / Consulting)	0.23	0.54

Again, the teams in The Department 1 seem to feel that they have more content of long messages (exchange of information instead of giving orders) than the teams in The Department 2. Now the researcher continues the analysis by examining the quantitative and qualitative results and relating them to the Communication strategies.

H3: the cohesion of a team will be greater when the team has a more collaborative communication strategy

The third hypothesis refers to the relationship between communication strategy and team cohesion. The statistics for the analysis of the route between the communication strategy and cohesion are given in the table 5.

Table-5

Dependent	Independent	R2	Adj. R2	F	Sig F	Beta	t	Sig t	VIF
Cohesion	Frequency	0.11	0.1	14.08	0	0.25	3.98	0	1
	Message					0.22	3.58	0	1
Frequency	Formality	0.13	0.12	15.06	0	-0.14	-2.19	0.03	1.01
	Bidirectionality					0.31	4.75	0	1.01

The evidence is a direct and positive relationship between the content of the indirect message and the evaluation of the cohesion of the team on the part of the people. Also, there is a mediated relationship for the impact of formality and bidirectionality on cohesion through the frequency of communication. With different impacts for teams, even small differences in communication strategy can have an increasing effect on team cohesion and, ultimately, profitability. Recalling that there were significant differences between the industries in Bidirectionality and message content, the following table examines the regression coefficient for each relationship between the variables by industry.

We can see that overall, the frequency of communication and message content that is indirect enhances team cohesion (R8 and R9). Also, to some extent less formal modes of communication enhances frequency (R10) and certainly greater bidirectionality of communication enhances the frequency of communication (R11).

CONCLUSIONS

The Mohr and Nevin framework has given us an appropriate framework within which the researcher may examine the relationship between communication strategies and behaviours, relational contexts and conditions, and the resulting outcomes on team performance.

The collaborative communication strategies may indeed enhance both relational and market-based channel relationships. Where intra-organisational teams exhibit a "network" structure and thus share aspects of both integration and control that are neither genuinely relational not market-based but a hybrid of both, collaborative communication strategies must act as a particularly important and powerful tool in enhancing team outcomes. As technology facilitates networked organisational forms and virtual team working environments, the importance of understanding intra-organisational relationships will grow.

The researcher has seen how understanding the process of communication can help identify critical areas of focus for managers of intra-organisational teams such as frequency and reciprocation of communication by team members. Communication technologies can facilitate such processes, but in and of themselves will not necessarily improve teamworking. Managers must develop an understanding of the linkages between communication behaviours, cognitive and affective assessments of team membership experience, and how this experience influences team performance. Such an understanding will allow managers to focus upon those areas of team communication that may have the most positive impact on the aspects of teamworking and performance they wish to facilitate.

The researcher has examined the relationship between communication strategy and team performance. Limitations to the study include the issue of self-generated validity (Feldman and Lynch 1988), where answers to previous questions in a self-completion questionnaire may influence subsequent answers and thus affect the correlations between constructs. This may be the case, even where multi-item measures are randomised in the questionnaire. Also, our sample of only three companies does limit the extent to which our industry-level results may be generalisable.

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SAP PROFESSIONAL' JOB SATISFACTIONS AND THEIR RETENTION

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ABSTRACT

Talent attraction and talent retention with SAP professionals has become a major challenge in IT sector. The IT sector and specially profession in SAP has been the most attractive sector to work which provides an admirable work environment, attractive compensation and rewards along with good career growth opportunities. Recruitment and selection of right employees is critical challenge for employers. Motivation and retention of valuable employees means success of business in turbulent environment. Employees are the most valuable assets of an organization. Their significance to organizations calls for not only the need to attract the best talents but also the necessity to retain them for a long term. This paper focuses on reviewing the findings of previous studies conducted by various researchers with the aim to identify determinants factors and its impact of SAP professional's job satisfaction and their retention. This research closely looked at the following broad factors: policies of compensation and benefit, promotion and career development, working conditions, relationship with superior authority, job security The study reached the conclusion on the basis of research survey conducted regarding SAP professional's job satisfaction and retention to better results.

Keywords: SAP professionals, job satisfaction, and retention

INTRODUCTION

This research attempted to explore the Impact of Key Factors on SAP Employees' Job Satisfaction and their retention'. The research provides a set of tentative major factors in relation with job satisfaction and retention as a guide; informed by research results, appropriate to Employees working as SAP Consultants in software companies in Pune, Maharashtra, India. The research has been carried out on primary data of selected SAP professionals who are given questionnaire set as per defined for this research and upon their respond the data has been processed and analyzed. The research has mainly classified in major chapters like Introduction, Research methodology, Literature review, Overview and history of ERP SAP growth, Data analysis and finding, Conclusions and Suggestions in which all required knowledge, information and required aspects in perspective of the research perspective is well defined and covered. The conclusion over findings attempted to suggest how the major factors considered correlates the SAP professional's job satisfaction and retention, and also suggested the most influencing factors need to be focused for improvement towards employee's job satisfaction.

Let's start first herewith the basic understanding of the profession relevant with the research subject.

SAP ERP

ERP stands for "Enterprise Resource Planning" it is all with techniques and concepts for an integrated business, which results effectively in the use of management resources, efficiency of an enterprise. It has been targeted for various businesses and has been integrating information across the company from manufacturing to small shops using ERP software.

SAP stands for Systems, Applications and Products in Data Processing. It was founded by five German Engineers in 1972. SAP is a software which large organizations use to manage their business. SAP has several modules each of which represent a business-process. Modules are usually abbreviated for the business process.

SAP is an enterprise resource planning (ERP) software product capable of integrating multiple business applications, with each application representing a specific business area. These applications update and process transactions in real time mode. It has the ability to be configured to meets the needs of the business.

SAP has a rich history of innovation and growth as a true industry leader. SAP applications and services enable more than 378,000 plus customers worldwide over 180 countries to operate profitably, adapt continuously, and grow sustainably.

JOB SATISFACTION AND RETENTION

Job satisfaction is nothing but the way how people feel about their job and a predictor of work behaviors such as organizational citizenship, absenteeism, and turnover It has to do with the extent to which people like or dislike their job. That's why job satisfaction and job dissatisfaction can appear in any given work situation. Job satisfaction represents a combination of positive or negative feelings that workers have towards their work.

The relationship between employee retention and job satisfaction at work has been one of the most researched areas in the field of management in relation to different professions and herewith attempted with IT SAP profession.

Employee retention is also one of the major concerns in an organization's competitive advantage especially in IT sector since it has an impact on the organization's productivity, efficiency, performances and sustainability of the organization.

OBJECTIVES OF THE STUDY

1. To understand why SAP professionals' job satisfaction factors
2. To understand the factors cause to higher attrition.
3. To understand the factors playing vital role in retention.

LITERATURE REVIEW

Beam (2009).

While lower paying job roles experience an overall higher average of employee turnover, they tend to cost companies less per replacement employee than do higher paying job roles. However, they incur the cost more often. For these reasons, most companies focus on employee retention strategies regardless of pay levels.

Gbrevbie (2008) has stated that employee retention strategies refer to the plans and means, and a set of decision-making behavior put formulated by the organizations to retain their competent workforce for performance.

Kaliprasad (2006) pointed out that an organizations ability to retain its employees completely depends upon its ability to manage them. He found out four interlinked processes that can be utilized for an effective human resource management system: the motivational process; the interaction process; the visioning process; and the learning process.

According to Olowu and Adamolekun (2005) it is becoming more essential to secure and manage competent human resource as the most valuable resource of any organization, because of the need for effective and efficient delivery of goods and services by organizations, whether in public or private sector. Therefore, for an organization to realize its goals, appropriate strategies for employee recruitment and retention are sine-qua-non for enhanced performance

Meaghan et al. (2002) The reasons to stay employee in organization are organization reward system, growth and development, pay package and work life balance. This is why retaining top talent has become a primary concern for many organizations today. Managers have to exert a lot of effort in ensuring the employee's turnover are always low, as they are gaining increasing awareness.

RESEARCH METHODOLOGY

In the present study, the researcher has attempted to investigate the impact of key factors on SAP professional's job satisfaction and their retention in IT sectors of Pune. The investigator has also attempted to examine the relationship among various parameters. Hence for this study descriptive design has been used. The research analysis was based on Primary data and Secondary data.

SAMPLE AND SAMPLING TECHNIQUE

A probability sampling design was used, based on the method of Simple random sampling.

STEPS IN THE DATA COLLECTION PROCESS

After having conducted a review of literature, the researcher worked on the research methodology. The selection of sample data was done based on various parameters which are explained as below. The sample size and selection was decided based on the guidance of guide.

a) Sample Design

Sample design was determined before data collection was undertaken. For developing the sample design following points was taken into consideration as sample size and technique applied as match with cross sectional observational study design.

b) Sample Size:

Sample size was 400 SAP professionals working in Pune city.

Assuming that 50% of SAP professionals are satisfied with the job and they will retain with that job and 50% not to nullify the effect of parameters considered under study.

As 50% of employees working on SAP technology in retain the job due to the different job satisfaction parameter under study like Compensation and Benefits, Career, working condition, relation with super authority and job security etc.

As considering the 50% employees satisfied with their job therefore incident rate (Probability= p) will be considered as $p = 0.50$ ($=50/100$) and hence not satisfied will be as $q = 0.50$ ($=1-p$),

c) Sampling Technique

The research sampling method that was be used in this study snowball sampling was obtain a more scientific result that could be used to represent the entirety of the population.

The population that will be considered by the researcher with reference to this research is the SAP professionals in Pune city

SELECTION OF SAP EMPLOYEES AND IT COMPANIES IN PUNE CITY:

Since the researcher stays in Pune city for last many years it was justified from all practical aspects to select Pune city as a research area, and limited to SAP professional only.

Primary & Secondary Data

Primary Data was collected through observations, interviews and a structured questionnaire. The Pilot questionnaire was prepared taking into consideration the objectives of the study. For studying impact of key factors on SAP Professionals' job satisfaction and retention in Pune city the data had been collected from various articles, websites, journals, publications and Research works of IT experts, M. Phil and Ph. D candidates.

JOB SATISFACTION AND RETENTION

After the collection of data, the answer sheets were tabulated. The data was tabulated using Statistical Package for the Social Sciences (SPSS) was used for all statistical analysis. Descriptive statistics for respondent information and T-test, Chi-square test, linear regression, multiple regression, and correlation were applied and performed in order to find the correlation between Compensation, promotion and career development potential, Working conditions, relationship with Superiors and Job security, and employee retention.

ANALYSIS & RESULTS

Table-1: Correlation between job satisfaction and the factors under study for job satisfaction.

Job Satisfaction	Variable	
	R	p
Compensation and benefits policy	0.88	0
Promotion and Career Development	0.82	0
Working conditions	0.75	0
Relationship with Superior authority	0.67	0
Job Security	0.69	0

From the above result we can conclude that there is a direct and significant correlation between Job Satisfaction and the Factors included in it. However multiple regression analysis has been done with job satisfaction as dependent variable to identify the significant contribution of components in it.

Table-2: Multiple Regressions between Job Satisfaction and the factors under study for job satisfaction.

Sl. No.	Factors of Job Satisfaction	β	Sig.
1	Compensation and benefits policy	0.203	0.000
2	Promotion and Career Development	0.248	0.000
3	Working conditions	0.228	0.000
4	Relationship with Superior authority	0.123	0.000
5	Job Security	0.142	0.000
Dependent Variable: Job Satisfaction			
R Square	0.57		

From the above result we can see the highest contributing factor in predictive value of job satisfaction is promotion and career development as $\beta = 0.248$ is highest among all the factors. Hence we can conclude that monetary factors are not the most important factor for job satisfaction, however it comes at third position after Promotion and Career Development & Working conditions.

Table-3: Correlation between Retention and the factors under study for job satisfaction.

Retention	Variable	
	r	p
Compensation and benefits policy	0.86	0
Promotion and Career Development	0.69	0
Working conditions	0.74	0
Relationship with Superior authority	0.61	0
Job Security	0.58	0

From the above result we can conclude that there is a direct and significant correlation between Retention and the Factors included in job satisfaction. However multiple regression analysis has been done with Retention as dependent variable to identify the significant contribution of components.

Table-4: Multiple Regressions between Job Satisfaction and the factors under study for job satisfaction.

Sl. No.	Factors of Job Satisfaction	β	Sig.
1	Compensation and benefits policy	0.240	0.000
2	Promotion and Career Development	0.184	0.003
3	Working conditions	0.062	0.031
4	Relationship with Superior authority	0.057	0.019
5	Job Security	0.068	0.014
Dependent Variable: Retention			
R Square	0.30		

From the above result we can see the highest contributing factor in predictive value of retention is Compensation and benefits policy as $\beta = 0.240$ is highest among all the factors. Hence we can conclude that monetary factors are the most important factor for retention, however the growth factors comes at second position.

Table-5: Cross tabulation between Career development and growth opportunities and job satisfaction & Retention.

Parameters		Promotion career development						Total	
		Disagree		Agree		Neutral			
		Count	Percent (%)	Count	Percent (%)	Count	Percent (%)	Count	Percent (%)
Job satisfaction	Disagree	124	90.5%	19	9.4%	11	55.0%	154	42.8%
	Agree	13	9.5%	178	87.7%	8	40.0%	199	55.3%
	Neutral	0	0.0%	6	3.0%	1	5.0%	7	1.9%
Total		137	100.0%	203	100.0%	20	100.0%	360	100.0%
Retention	Disagree	85	62.0%	13	6.4%	10	50.0%	108	30.0%
	Agree	36	26.3%	171	84.2%	5	25.0%	212	58.9%
	Neutral	16	11.7%	19	9.4%	5	25.0%	40	11.1%
Total		137	100.0%	203	100.0%	20	100.0%	360	100.0%

The relation between Promotion & career development and job satisfaction is found out to be significant, $\chi^2(df=4, N=360) = 222.7, p < 0.05$. Similarly, relation between Promotion & career development and retention is also found out to be significant, $\chi^2(df=4, N=360) = 142.0, p < 0.05$. Hence, we can conclude that retention and job satisfaction are dependent upon Promotion & career development.

CONCLUSION

The present study revealed that factors such as Compensation and benefits, Career development, working condition and job security can enhance job satisfaction in employees which will lead to employee performance and retention.

Study illustrated that these are the main major key factors which play role in job satisfaction and resulted into improvement of employee retention. Compensation has been revealed as important motivator when an employee achieves his goals or targets. Therefore any organization will try to give the right rewards for the right employee. According to the result, majority of employees expressed and agreed that prefer equitable compensation. Though the IT companies mostly operates on flexible work schedule facility to employees but still there is a great scope for to be more flexible in work schedule and work from home option. The results

indicated majority of employees liked the flexible work schedule and adopt work from home facility. Thus, it can be said that workplace flexibility has a strong impact on employee retention.

SUGGESTION

From this study it is clearly noted that to increase the job satisfaction and retention of an employee it is very necessary that an organization should often review on compensation as per market, emphasis on SAP professional's career and development, working condition and work flexibility and need to make employee feel on job and project security.

An organization also need to mind it that dissatisfaction with project manager may lead for an employee to change the organization and thus need to be with very open culture where employee have freedom to put the concerns in right forum and the concerns must be listened and understood before it turn into dissatisfaction and decision to leave the organization.

As per respondent's response and result it's clearly stated that poor timings or difficult working hours lead an employee to change his mind set in following his responsibility which may cause into dissatisfaction resulted into leaving the organization and so in such criteria organization should not have any hurdle to allow them flexible working hours or work from options.

The traffic conjunction in Pune city has been a big problem which lead employees want to avoid the travel time and expect the work from home option from project manager or organization so that they can save time and can be more effective and efficient in following the assignments and work responsibility towards customer. I such case project manager or organization does not allow them work from option it may turn in dissatisfaction and inclined to search better option available in market of perceptive of that. So organization must understand the importance of working from option and make changes in policy accordingly.

Many a times as learned salary is not an objective for an employee to remain with an organization. Companies should understand the need to offer non-monetary benefits to their employees. Companies must provide opportunity for promotion which clearly determines the degree of satisfaction to the employee.

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ANALYSIS OF HUMAN RESOURCES SYSTEMS ON GROWTH, MARKET SHARE AND PROFITABILITY AND CUSTOMER SATISFACTION

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ABSTRACT

The role of human resources has undergone change from being reflective to proactive. The organizations have realized that human resources are the most important assets in the organization. Organizations are giving more and more importance to the people. This emphasis is also due to the new emerging values of humanism and humanization. There is an increased focus on creativity and autonomy. This is due to people realizing that it is important to have freedom and creativity. The expectation of people are fast changing, people cannot be taken for granted anymore. There are lot of changes which are happening at a very fast pace. Organizations are now working in a global environment.

Keywords: human resources, freedom, creativity

INTRODUCTION

Human Resources are vital for any organization. People working in the organization constitute human resources. Productivity, quality of the product, relationship with suppliers, customers, branding – everything depends upon the people working in the organization. People can be said to be the life-line of any organization. The concept of human resources has undergone many transformations since the importance of people in organization was realized. Realizing the importance of human resources in an organization, keeping information about the human resources working in the organization is very vital. The term human resources systems has evolved over a period of time to systematically recruit, train and retain the employee in the organization. The Human Resources (HR) department of any organization administers human resources through the Human Resources System. A human resources system includes processes such as the selection of employees through raising vacancy adverts, calling for resumes, and facilitating interviews to finalize the hiring of employees with good skill sets. It also includes identifying training needs and scheduling of optimum training of employees through participation in conferences and seminars. Remuneration to employees is another important aspect that HR administers through the HR system. At this juncture, it would be insightful to have an overview of the Human Resource Systems.

REVIEW OF LITERATURE

Noon, (1992), Armstrong, (2000), observed that the change in the nomenclature from personnel management to human resources management was due to evolvement and changes in the world of management and the new term was introduced so as to take up new ideas, concepts and philosophies of human resources.

Marchington and Wilkinson, (2002); Legge, (2005) continued this debate and argued that both human resources management and personnel management are the same concept with different names. They have same meaning and practice as of personnel management, this debate is still continued on the meaning and practice of human resources management. Another concept used in practice of human resources management is human resources development.

Legge, (2005) commented on the work of scholars and stated that most of the scholars feel that there are no much difference between personnel management and human resources management and it is the same thing with a new label.

According to Ivancevich, (2007), in the 19th century, Frederick W. Taylor suggested that a combination of scientific management and industrial psychology of workers should be introduced. The proposal was made to manage the workers from job and efficiencies related with the jobs and psychology and maximum welfare of the workers.

Due to radical changes in technology, the growth of organizations, unionism and intervention by the governments the personnel department came in existence in 1920. During these days the personnel administrators were called welfare secretaries and their prime responsibility was to take care of the welfare of the workers in the organization. Stead and Lee (1996) believed that the development of human resources in an organization goes far beyond the training and also takes care of the development and motivation aspects as suggested by organizational psychologists such as Blake,(1995).

Grip and Sieben (2009), studied the more advanced human resource systems in small firms. They analyzed whether human resources system in small firms can be associated with higher performance as well as higher wages. Their study focused on Dutch pharmacies and the data was collected from 549 out of total 1319 pharmacists who responded to the questionnaire. They noted that the human resources system approach is more adequate in analyzing effects of human resources management. They analyzed the effects of non-traditional human resources systems on the performance of Dutch pharmacies, which are micro firms, which operate on a local market. The pharmacies did not have advanced human resources system but focused on improving the quality of workforce by means of performance evaluation, permanent contracts, training, employ highly competitive workforce and allowed assistants to perform tasks of pharmacist. They found that workers benefit from more advanced human resources systems as the system includes higher wages. This shows that the firms reward the higher quality of workforce. They did not find any positive effect of the intermediate human resources system on employee's wages. They also found that more advanced human resources systems do not have any effect on firm's productivity, as normally observed in large firms.

Sinha (1991) stated that HRD is development of skills, through action learning and continuing education, these capability contributes to human resources development. Capability building has to be supported with commitment to work.

Bose and Natrajan (1991) study at Colgate Palmolive highlights that human resources development through training can build a firm foundation of Mutual Trust and independence which helps in bringing change in organizational culture, conducive far better industrial relations and increased productivity.

Shah (2012) and Shirodkar (1988)'s studies reveal that besides qualitative gains, quantitative results in terms of increasing sales turnover, profit, labour productivity and discipline can also be attained through HRD. According to Shah, HRD brings healthy organizational climate and culture which helps in setting individual and departmental goals.

Messersmith and Guthrie (2010) studied the high performance work systems organizations and their implications on the firm's performance they observed that the most important challenge faced by the human resources today is finding and retaining the right people. They stated in that the most important part of an organization are people and human resources systems designed to acquire, develop, and motivate talented individuals have implications for firm performance. These policies and practices seem particularly salient for firms relying on innovation and an entrepreneurial spirit to compete in today's dynamic business world. They studied the data of 2018 establishments and provided a number of theoretical and practical implications which showed that using high performance work systems is associated with higher levels of sales growth, product innovation, and organizational innovation. The study results did not support a mediating relationship for firm turnover levels.

RESULT

Growth, market share, profitability and customer satisfaction are measured with the help of the statements of responses collected with the help of structured questionnaire. The percentage is measured at 5 points scale. Separate tables are given to show the status in all the sample organizations. The data collected represent the snapshot view and the situation at the time of survey. There is a possibility that the scenario in different organizations might have been drastically changed or improved.

Table-1: Revenue growth

Organization	At an all time low level		Worse		Same		Better		At an all time high level		Total
	Resp	%	Resp	%	Resp	%	Resp	%	Resp	%	
Reliance Ind.							132	79.04	35	20.95	167
Blue Star					1	1.44	43	62.31	25	36.23	69
Bilag Ind.					50	100					50
Micro Inks			2	1.43	26	18.70	95	68.34	16	11.51	139
Aarti Ind.					6	6.18	58	59.79	33	34.02	97
Raymond	2	1.61	2	1.61	14	11.29	105	84.67	1	0.80	124
Hindustan Lever							17	22.66	58	77.33	75
Enercon			5	5.15	4	4.12	84	86.59	4	4.12	97
Blossom Ind.							21	60	14	40	35
Paper Products					50	59.52	34	40.48			84
Total	2	0.21	9	0.96	151	16.11	589	62.86	186	19.85	937

Revenue growth of an organization is an important indicator of its performance. When asked about the revenue growth as compared to the last five years, majority of the respondents were on the positive end of the scale. All respondents from Blossom Industries, Hindustan Lever Ltd. and Reliance Industries gave a positive response. Other organizations like Blue Star Ltd., Aarti Industries and Enercon had 98.55, 93.81 and 90.72 percent of respondents respectively stating it was much better as compared to the last five years. Raymond and Micro Inks had 85.48 and 79.86 percent respondents also expressed similar views. 59.52 percent respondents from Paper Products were of the opinion that it was the same as compared to the last five years whereas 40.48 percent respondents were of the opinion that it was better than the past five years forming a mixed response which indicated the revenue growth is marginally better as compared to the past five years. In Bilag Industries, 100 percent respondents felt that the revenue growth was same. Overall, all the organizations had a good revenue growth as compared to the last five years.

Table-2: Market Share

Organization	At an all time low level		Worse		Same		Better		At an all time high level		Total
	Resp	%	Resp	%	Resp	%	Resp	%	Resp	%	
Reliance Ind.					4	2.39	99	59.28	64	38.32	167
Blue Star					1	1.44	28	40.58	40	57.97	69
Bilag Ind.					50	100					50
Micro Inks	3	2.15	2	1.43	31	22.30	92	66.18	11	7.91	139
Aarti Ind.					6	6.18	69	71.13	22	22.68	97
Raymond	1	0.8	1	0.80	13	10.48	105	84.67	4	3.2	124
Hindustan Lever							11	14.66	64	85.33	75
Enercon	5	5.15			20	20.61	50	51.54	22	22.68	97
Blossom Ind.							24	68.57	11	31.42	35
Paper Products					39	46.42	45	53.57			84
Total	9	0.96	3	0.32	164	17.50	523	55.81	238	25.40	937

Market share plays an important role in determining the growth of an organization. When asked about the market share as compared to last five years, 100 percent respondents from Blossom and Hindustan Lever were of the opinion that it is at the peak as compared to last five years.

Blue Star, Reliance and Aarti Ind followed with 98.55, 97.6 and 93.81 percent respondents on the positive end of scale stating it was better as compared to the last five years. For Raymond, Enercon, Micro Inks and Paper Products majority of the respondents were on the positive end stating it was better as compared to the last five years.

All the respondents from Bilag Industries were of the opinion that it was same as compared to the last five years. 5.15 percent respondents from Enercon, 3.6 percent respondents from Micro Inks and 1.61 percent respondents from Raymond were on the negative end.

Table-3: Profitability

Organization	At an all time low level		Worse		Same		Better		At an all time high level		Total
	Resp	%	Resp	%	Resp	%	Resp	%	Resp	%	
Reliance Ind.					2	1.19	106	63.47	59	35.32	167
Blue Star					1	1.44	44	63.76	24	34.78	69
Bilag Ind.					50	100					50
Micro Inks			1	0.71	31	22.30	97	69.78	10	7.19	139
Aarti Ind.					6	6.18	66	25.77	25	25.77	97
Raymond					17	13.70	103	83.06	4	3.22	124
Hindustan Lever					8	10.66	23	58.66	44	58.66	75
Enercon			5	5.15	16	16.49	71	63.76	5	5.15	97
Blossom Ind.							24	31.42	11	31.42	35
Paper Products					41	48.81	43	51.19			84
Total			6	0.64	172	18.35	577	61.57	182	19.42	937

When asked about the profitability 100 percent respondents from Blossom Industries were of the opinion that it is far better as compared to the last five years. Not afar were Reliance Industries, Blue Star, Aarti Industries, Hindustan Lever Ltd. and Raymond Ltd., with 98.8 percent, 98.55 percent, 93.81 percent, 89.33 percent and 89.29 percent respectively on the positive end. 100 percent respondents from Bilag and 48.81 percent respondents from Paper Products were of the opinion that it was same as compared to the last five years. 51.19 respondents from Paper products stated that it was almost better as compared to the last five years. Overall 81 percent respondents were on the positive end.

CONCLUSION

Once we look at all the indices we can find that in terms of revenue growth all the ten organizations had better market share as compared to last five years clearly showing that all these organizations had growth in terms of their turnover. In terms of market share, all organizations except Bilag had a growth in their market share. In case of Bilag the growth remained constant as the organization supplies all the material produced to its parent German company and unless the capacity is increased there can not be further growth. In case of profitability as compared to last five years, respondents in all the organizations reported that their profitability was better or same. In case of Bilag the profitability remained same as the material produced is transferred on transfer price basis. Customer satisfaction is very important for the growth of any organization. Most of the respondents stated that the customer satisfaction of their organization was same or better explaining the growth of the organizations.

One can sum up and state that respondents felt on all the performance parameters the sample organizations performed better in comparison to last five years.

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CHALLENGES FACED BY INDIAN ENTREPRENEURS OF MSME: AN EMPIRICAL ANALYSIS

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ABSTRACT

Micro, Small and Medium Enterprises (MSMEs) have appeared as an extremely vibrant and dynamic sector of the Indian economy over the last live decades. MSMEs play a crucial role in providing large employment opportunities to urban and rural population at comparatively lower capital cost and help in industrialization of rural and backward areas. Therefore, this sector has a major role in reducing regional imbalances and promoting a more equitable distribution of national income and wealth. MSMEs are complementary to large industries and this sector contributes to a great extent in the socioeconomic development of the country. It significantly contributes to India's GDP and export. According to the fourth all India census of MSME, it has shown constant growth rate of more than 10 percent every year till 2010-11, whereas in the year 2011-12 the growth rate was 19 percent.

The MSME sector is an important pillar of Indian economy and assumes greater importance now as the country moves towards a faster and inclusive growth agenda. MSMEs have been acknowledged as latent target for encouraging financial inclusion. Although there is an overwhelming institutional response, even then India need for bringing the unregistered entrepreneurs under a supporting microfinance environment. The present paper attempts to identify challenges faced by entrepreneurs and small firms, response of the government and possible solutions to their problems. The objective of the study has been achieved through an empirical study of the success factors for entrepreneurs.

Keywords: Financial Inclusion, Entrepreneur, Microcredit, Medium, Small and Medium-sized Enterprises (MSMEs), Globalization, organized and unorganized sector

INTRODUCTION

Globalization has accredited the path for family-owned conglomerates (such as the Tata Group- a multinational corporation, MNC) and technology-driven entrepreneurial start-up organizations (such as Infosys- global provider for tailor-made business solutions). While technology upsurge has been accountable for growth, the challenges that entrepreneurs of Micro, Small and Medium Enterprises (MSMEs) face are yet to be fully addressed. The present study attempts to identify the challenges faced by entrepreneurs for (MSMEs)¹, response of the Government and plausible solutions to their problems. In the present scenario, India need an inclusive growth for safeguarding the equality of economic opportunity and financial inclusion is the guiding path towards this destination. Entrepreneurs in the MSMEs have been acknowledged as latent target for encouraging financial inclusion. Following the same notion, Government has set up a policy making body as National Commission on Enterprises in the Unorganized Sector (NCEUS). It suggests programs and policies resolving wide range of issues that affect the productive potential of a large segment of the unorganized micro and small productive units.

Assistance gained by the MSMEs will help them in becoming the future Multi -National Companies of India (Chakrabarty, 2011 and 2012). Policymakers serve four major objectives for the product development of MSMEs as 'poverty reduction, empowerment of women, employment generation and enterprise development'. Reserve Bank of India have identified four pitfalls in the policies related to MSMEs and have warn entrepreneurs to beware of the same. First, entrepreneurs need to realize the importance of cash flows without focusing on profits. Second, products may serve better in some other role from what it was designed for. Third, entrepreneur need to concentrate when the business brings success. Last that is fourth, exponential growth requires keen attention.

MICRO, SMALL AND MEDIUM SIZED ENTERPRISES (MSMEs) IN INDIA

MSMEs play an important role in India and their importance in the country's progress is growing with time. It has emerged as a highly vibrant and dynamic sector of the economy. It provides large employment opportunities at lower capital cost as compared to the large industries. It also helps in the development and industrialization of rural and backward areas. This in turn reduces the regional inequities and guarantees more equitable distribution of national wealth and income. The government agencies at the central and state levels treat MSME sector at

¹ The MSMEs' original investment in plant, machinery and equipment ranges between \$20,000 and \$2,000,000 to fit into this classification.

priority as the labor intensity in this sector is higher than in the MNCs. India through a focused effort provide an overwhelming response in favor of institutionalized lending to MSMEs (Venkataramany at el., 2009). A wide range of financial institutions in the country as Commercial Banks, Urban Cooperative Banks, Regional Rural Banks (RRBs) and Non-Banking Financial Companies provide credit to various sectors of the economy including MSMEs. In addition to these sources, short-term rural credit at the grass root level is accentuated through District Central Co-Operative Banks (DCCBs), State Co-Operative Banks and Primary Agricultural Cooperatives. Long term credit needs in rural India are served by State Cooperative and Agricultural Rural Development Banks and Primary Cooperative and Agricultural Rural Development Banks. The Reserve Bank of India in its annual report (August 25, 2011 Chapter IV, Credit Delivery and Financial Inclusion) stated that the MSMEs accounts with commercial banks for availing credit facilities were 8.5 million in 2010 and 9.3 million in 2011. Their outstanding credit in \$ was 80,509.11 and 107,660.67 in 2010 and 2011 respectively. The ratio of credit to MSMEs to Total credit grew from 13.4 percent in 2010 to 9.9 percent in 2011.

MSMEs are analogous to large industries and play a crucial role in the social and economic development of the country. According to fourth all India Census of MSME, this sector contributes significantly to the number of enterprises, employment and output of the country. Based on the augmented data sets of Third and Fourth All India Census of MSME Economic Census (EC 2005), the performance of MSME Sector and its role in the Indian economy is summarized in table i.

Table-I: MSMEs in India-performance, employment and assistance

Year	Working Enterprises (Lakhs)	Employment (Lakh persons)	Fixed investment (Rs. Crore)	Gross Output (Rs. Crore)	Share of MSME sector in GDP (%)
2014-15	510.57	1,171.32	1,471,912.94	-	-
2013-14	488.46	1,114.29	1,363,700.54	-	-
2012-13	467.54	1,061.40	1,268,763.67	1809,976	37.54
2011-12	447.64	1011.69	1182,757.64	1834,332.05	37.97
2010-11	428.73	965.15	1105,934.09	1721,553.42	36.69
2009-10	410.82	921.79	1038,546.08	1619,355.53	36.05
2008-09	393.7	880.84	977,114.72	1524,234.83	36.12
2007-08	377.36	842	920,459.84	1435,179.26	35.41
2006-07	361.76	805.23	868,543.79	1351,383.45	35.13
2005-06	123.42	294.91	188,113.00	497,842.00	-

Source: Ministry of MSME, Annual report 2012-13 and 2015-16, Govt. of India¹

Working enterprises have increased tremendously year by year in numbers from 123 in 2005-06 to 510 in 2014-15. MSMEs are providing the employment opportunities to a large population i.e., 1,171.32 lakhs as on 2014-15. During 2005-06, employment opportunities provided were 294.91 lakhs. MSMEs have also witnessed a huge investment in fixed assets as Rs. 1,471,912.94 crore as on 2014-15. Their gross output for the year 2012-13 is reported at around Rs. 1809,976 crore. In this manner MSMEs have been significantly contributing in Gross domestic Product, GDP of the country. As on 2012-13 share of MSMEs in the country's GDP was around 37.54 percent.

For MSMEs, the latest census conducted was fourth All India Census. It was conducted with reference year 2006-07, wherein the data was collected till 2009 and the results were published in 2011-12. Estimates of the Census suggest that country has more than 36 million working enterprises. Yet, only 1.5 million units are registered thus leaving data of about 24.5 million units out of enumeration. Unregistered MSMEs fear that their data information might be leaked to the regulators and bureaucrats². Therefore, they voluntarily operate in a world of financial exclusion thus denying themselves the privileges of credit, marketing support, export and import license and financial literacy tools.

Only 5 percent MSMEs seek credit from commercial banks and remaining 95 percent still rely on self-finance. Only major players have been joined with the network of multinational corporations and small units tend to be either part timers or self-employed or cater to auxiliary business units. In decades, little development has been

¹ <http://msme.gov.in/sites/default/files/MEME%20ANNUAL%20REPORT%202015-16%20ENG.pdf>

² Goel, Deepak, "MSMEs not co-operating with us during data collection for 4th MSME Census": <http://www.smetimes.in/smetimes/face-to-face/2008/May/27/msmes-not-co-operating-with-us-deepak-goel.html>

witnessed in the adoption of technology because of the skills, financial resources and awareness¹. Government has made liberal credit guarantee to facilitate smooth credit assistance to entrepreneurs. For instance, 80 percent of default credit of a loan of \$100,000 accorded to women entrepreneurs and 85 percent of default credit of a bank loan of \$10,000 to a MSME are unprecedented.

LITERATURE REVIEW

Mali (1998) observed that micro small and medium enterprises (MSMEs) have to face increasing competition in the present scenario of globalization, specifically in the fields of management, product diversification, marketing, infrastructure and technological upgradation. Moreover, the study suggested that new MSMEs may have to move from slow growth area to the high growth area and have to form strategic alliance with entrepreneurs of neighboring countries. Also, to guide the prospective entrepreneurs, data bank on industries is needed. The impact of globalization and domestic reforms on small-scale industries sector was highlighted by Bala Subrahmanya (2004). As per the study, small industry had suffered in terms of growth of units, output, employment and exports. The Researcher highlighted that new opportunities opened for this sector through policy changes. He suggested that entrepreneurs must focus on technology development and a strong financial infrastructure to contribute to national income and make Indian small industry internationally competitive.

Bargal et al. (2009) examined the causal relationship among the three variables as GDP, Small, Scale Industries (SSI) output and SSI exports and also have compared the performance parameters of SSIs in the pre and post liberalization era. The study found that the annual average growth rate of different parameters of SSIs have declined in the period of nineties vis-à-vis the pre-reform years. There is an absence of any lead lag causal relationship between exports and production in small-scale sector and GDP of Indian economy. Small firms can manage their operations during growth but, during lower business activity these are forced to access bank credit (Manna, 2009). Author emphasized that the primary problem of MSMEs' lies in the production and marketing of their products as they have a very limited scope in marketing research, advertising and financial resources. In addition to this, inability to secure long-term funding and shortage of working capital pose additional threat for the survival of these firms. Dixit and Pandey (2011) examined the causal relationship between MSMEs numbers, output, employment, exports, and their fixed investment and India's GDP, employment (public and private) and total exports for the period 1973-74 to 2006-07 by applying co-integration analysis. Authors revealed a positive causality between MSMEs output and India's GDP.

Singh et al. (2012) analyzed the performance of Indian Small scale industry and focused on policy changes that have provided new opportunities for this sector. Their study concluded that SSI sector has made good progress in terms of number of units, employment and production. The study recommended technology development and strong financial infrastructure to achieve growth target. Venkatesh and Muthiah (2012) found that the role of small & medium enterprises in the industrial sector is growing rapidly and emphasized the nurturing of SME sector for the economic well-being of the country. Pema Lama (2013) suggested that MSMEs needs to improve its productivity and quality, reduce costs and innovate. Author emphasized for friendly Government policies, improvement of infrastructure, arranging timely finance and efficient management for the growth of MSMEs. Sanjeeb (2014) highlighted some key challenges faced by Indian MSMEs as Lack of availability of adequate and timely credit, high cost of credit, collateral requirements, limited access to equity capital, procurement of raw material, problems of storage, designing, packaging and product display, lack of access to global markets, inadequate infrastructure facilities, low technology levels, lack of skilled manpower and multiplicity of labor laws.

Government has identified some common challenges for MSMEs as technology obsolescence, delayed payments, managerial inadequacies, incidence of sickness, poor quality, lack of appropriate infrastructure, raw materials, marketing network, technology, credit, human resource, managing exports, infrastructure, and increasing competition. Government's Response Entrepreneurship Development Programs (EDPs) aims to assist new entrepreneurs in setting up micro and small enterprises. Various public and private training institutions organize skill development programmers (SDPs) and entrepreneurship-cum-skill development programmers (ESDPs). The Ministry of MSME regularly collects data on its manufacturing and services and analyze this data to understand the challenges and constraints faced by the MSMEs amidst opportunities available to them. To facilitate the promotion and development of MSMEs, Micro, Small and Medium Enterprises Development Act, 2006 has been enacted.

¹<http://www.smetimes.in/smetimes/editorial/2012/Jan/31/technology-adoption-an-achilles-heel-indiansmes80001.html> 439

The above literature highlights the various aspects that is performance, growth and problems of MSMEs in Indian economy and persuades for further research in this field. The present paper attempts to fill this gap by identifying the challenges faced by entrepreneurs of micro, small and medium sized enterprises, response of the government and possible solutions to their problems.

OBJECTIVE OF THE STUDY

The MSME sector is an important pillar of Indian economy and possesses tremendous potential and scope for the growth. Yet it is facing enormous problems, challenges and threats. The objective of the present study is

“To identify the challenges faced by entrepreneurs of micro, small and medium sized enterprises (MSMEs) and possible solutions to their problems.

METHODOLOGY

Variables/ factors

Global Entrepreneurship Monitor (GEM)¹ has suggested twelve factors responsible for entrepreneurial success. These are:

- i. The availability of financial resources
- ii. Government policies supporting entrepreneurship
- iii. Taxes or regulations encouraging SMEs
- iv. Government programs assisting entrepreneurship
- v. Entrepreneurship education: school stage
- vi. Entrepreneurship education: post school stage
- vii. National research and development that lead to new commercial opportunities for SMEs
- viii. Commercial and legal infrastructure
- ix. Internal Market dynamics
- x. Internal market burdens or entry regulation
- xi. Physical infrastructure
- xii. Cultural & social norms

Data for the above-mentioned twelve factors for the period between 2007 and 2015 is collected from the data bank of Global Entrepreneurship Monitor. The analysis is done through multiple regression equation to understand the path to success for entrepreneurs. Financing is the key ingredient for the success of entrepreneurs. Therefore, financing is the dependent variable and other eleven factors are independent variables. Regression is run with the help of software SPSS. The regression equation to analyze the impact of eleven factors on financing is:

Financing = α (constant) + β_1 (supporting policies) + β_2 (taxes) + β_3 (Govt. entrepreneurship programs) + β_4 (entrepreneurial education: school level) + β_5 (entrepreneurial education: post school stage) + β_6 (R&D transfer) + β_7 (commercial and legal infrastructure) + β_8 (market dynamics) + β_9 (market burdens or entry regulation) + β_{10} (physical infrastructure) + β_{11} (Cultural & social norms) + β_{12} (dummy variable)

The pattern of these twelve success factors for the entrepreneurs of MSMEs from the year 2007 to 2015 has been presented in table ii.

Table-II: Factors of entrepreneurial success in India

Year	2007	2012	2013	2014	2015
Financing for entrepreneurs	3.37	3.09	2.82	3.11	5.74
Supporting policies	2.73	2.92	1.89	3.00	5.50
Taxes	2.31	2.18	1.84	2.43	3.94
Govt. entrepreneurship programs	2.42	2.79	2.05	2.94	4.52
Entrepreneurial education: school stage	2.12	1.92	1.50	2.33	4.11
Entrepreneurial education: post school stage	2.91	2.73	2.42	3.09	5.09
R&D transfer	2.89	2.54	1.94	2.86	4.29

¹ file:///C:/Users/300122/Downloads/gem-2016-2017-global-report-web-version-updated-210417-1492789938.pdf

commercial and legal infrastructure	3.99	3.10	2.95	3.40	4.96
Market dynamics	3.02	3.13	3.51	3.45	5.72
market burdens or entry regulation	3.12	2.85	2.49	2.87	4.75
Physical infrastructure	4.07	3.71	3.68	3.96	6.15
Cultural and social norms	3.41	3.20	2.69	3.43	5.45

Source: Global Entrepreneurship Monitor, 2016/17 Global Report

Table-III presents the correlation matrix among the variables. In this table, β_1 to β_{11} represent the eleven dependent variables as supporting policies, taxes, Govt. entrepreneurship programs, entrepreneurial education: school stage, entrepreneurial education: post school stage, R&D transfer, commercial and legal infrastructure, market dynamics, market burdens or entry regulation, physical infrastructure and cultural and social norms respectively. The results of the regression analysis of the data has been summarized in table iv.

Table-III: Correlation Matrix- Factors Impacting Financing to Entrepreneurs

	Financing	β_1	β_2	β_3	β_4	β_5	β_6	β_7	β_8	β_9	β_{10}	β_{11}
Financing	1.000											
β_1	0.758	1.000										
β_2	0.705	0.680	1.000									
β_3	0.837	0.774	0.777	1.000								
β_4	0.721	0.715	0.646	0.749	1.000							
β_5	0.836	0.746	0.701	0.870	0.717	1.000						
β_6	0.853	0.738	0.757	0.857	0.745	0.821	1.000					
β_7	0.740	0.799	0.649	0.813	0.752	0.820	0.803	1.000				
β_8	0.647	0.615	0.453	0.577	0.494	0.558	0.581	0.572	1.000			
β_9	0.792	0.702	0.809	0.837	0.672	0.791	0.880	0.772	0.502	1.000		
β_{10}	0.775	0.715	0.730	0.812	0.578	0.832	0.799	0.758	0.641	0.787	1.000	
β_{11}	0.793	0.691	0.773	0.776	0.645	0.710	0.791	0.715	0.614	0.846	0.723	1.000

Source: Data analysis by author

Table-IV: Regression Results (2007-2015)

Dependent Variable: Financing for entrepreneurs	Model
Constant	- 0.153 (-2.295) ***
Supporting policies	0.019 (5.619) **
Taxes	- 0.071 (-2.085) ***
Govt. entrepreneurship programs	- 0.023 (-0.455) ***
Entrepreneurial education: school stage	0.096 (2.308) *
Entrepreneurial education: post school stage	- 0.230 (-5.264) ***
R&D transfer	0.366 (6.813)
commercial and legal infrastructure	0.328 (7.495)
Market dynamics	0.093 (3.964) *
market burdens or entry regulation	0.118 (2.167)
Physical infrastructure	0.002 (0.070) ***
Cultural and social norms	0.119 (3.764)
Adjusted R ²	0.835

Source: Data analysis by author

For each variable, t-statistics appear in parentheses;

* means significant at 90 percent confidence level,

** means significant at 95 percent confidence level and

*** implies significant at 99 percent confidence level.

DISCUSSION OF RESULTS

Regression analysis indicates that financing for entrepreneurs is significantly dependent upon supporting policies, taxes, Govt. entrepreneurship programs, Entrepreneurial education at school and post school stage, Physical infrastructure, market dynamics and physical infrastructure. Highly significant variables are taxes, Govt. entrepreneurship programs, Entrepreneurial education at post school stage and Physical infrastructure.

Therefore, it emphasizes on providing the entrepreneurship education at post school level and the importance of support provided by the Government to MSMEs entrepreneurs as tax policies, required infrastructure and promotional programs. However, supporting policies, entrepreneurial education at school level and market dynamics also play an important role in financing for entrepreneurs.

The variable for R&D transfer, commercial and legal infrastructure, market burdens or entry regulation and Cultural and social norms is insignificant thereby indicating the lack of knowledge of entrepreneurs in accessing and utilizing such programs, wasteful resources of the government and inability of the government to propagate the information.

CONCLUSION

Medium, small and medium enterprises (MSMEs) contribute to economic development of the country in various ways such as creating employment opportunities for rural and urban population, providing goods and services at affordable costs and sustainable development to the economy as a whole. SMEs in India face a number of problems such as non-availability of updated technology, absence of adequate and timely banking finance, non-availability of skilled manpower and futile marketing due to limited resources. The MSME sector contributes significantly to manufacturing output, employment and exports of the country. Government of India has taken various initiatives to make this sector more vibrant and significant player in development of the Indian economy. MSMEs need to improve its productivity, efficiency and quality, reduce costs and innovate. MSMEs need supporting Government policies to increase their efficiency and competitiveness within a market driven economy. This growth engine can be on right path and direction through the formulation of friendly policies, upgradation in infrastructure, encouraging operating environment, arranging timely and affordable finance, attaining peace and security, efficient management and arranging appropriate modern technology for MSMEs.

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AN IMPACT OF DIGITAL MONEY WITH PERSPECTIVE OF CONSUMER'S ADOPTION

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ABSTRACT

After demonetization Country moves towards cashless payment which result increase in The growth of digital payment system. Technology advancement increased the use of mobile and internet is also bringing the growth in use of digital payment. This transformation in digital payments benefits in more transparency in transactions and reduce cash related risk. It is also helpful in increasing employment which empowers the country's economy. In these days many changes took place in the payment system like digital wallets, UPI and BHIM apps, debit/credit card, etc for smooth shift to digital payments. The objective of this research paper is to study the positive impact of Digitization of payment system from consumer point of view. This paper focus on the analysis of the adoption level of digital payment system by customers and find out how Digitization helps to improve their lifestyle. Primary data was collected from 100 respondents from Indirapuram, Vaishali (Ghaziabad). The collected data through the questionnaire were analyzed statistically by using Chi square technique and ANOVA and percentage method

Keywords: Digital payments, demonetization, E-Payments, online payments.

INTRODUCTION

It has been said that every disruption creates opportunities and one such disruption was the announcement of demonetization by Prime Minister Mr. Narendra Modi on 08 November 2016. The aim of the demonetization is to remove black money, putting an end to fake currency circulation, stop funding terrorism, transparency in dealings and a move towards cashless economy. Due to demonetization, more and more people have started understanding the need for utilizing digital payments as so many people had to wait many hours every day in queue to deposit or convert the money that they have. In such crucial situations, digital payments prove a boon. The consumers can save time that they spend hours standing in bank queues. With cashless payments, customers can swipe a bank card or use mobile apps for transactions. There are a lot of digital payment methods like mobile wallets, Unified Payment Interface, card payments, net banking, etc. This has resulted in ease of transfer of money in rural areas which was not known earlier. Now many foreign investors want to invest in digital payment industry which is new attractive destinations which also helps in generation of employment.

DIGITAL PAYMENT MODES IN INDIA

There are several mode of digital payment available in India. These are

Online or mobile wallets: it is used via the internet and through smartphone applications. Money can be stored on the app via recharge by debit or credit cards or net-banking. Consumer wallet limit is Rs. 20,000 per month and the merchant wallet limit is Rs. 50,000 per month after self-declaration and Rs. 100,000 after KYC verification.

Prepaid credit cards: it is Pre-loaded funds to individual's bank account. It is similar to a gift card; customers can make purchases using funds available on the card -and not on borrowed credit from the bank. .

Debit/RuPay cards: These are linked with an individual's bank account. This can be used at shops, ATMs, online wallets, micro-ATMs, and for e-commerce purchases. Debit cards have overtaken credit cards in India. The number of debit cards in India had 37.48M credit cards, 861M debit cards in March 2018.

AEPS: The Aadhaar Enabled Payment System uses the 12-digit unique Aadhaar identification number to allow bank-to-bank transactions at PoS. AEPS services include balance enquiry, cash withdrawal, cash deposit, and Aadhaar to Aadhaar fund transfers.

USSD: Stands for Unstructured Supplementary Service Data based mobile banking. It is linked to merchant's bank account and used via mobile phone on GSM network for payments up to Rs. 5,000 per day per customer.

UPI: The United Payments Interface (UPI) system that powers multiple bank accounts onto a single mobile application platform (of any participating bank).

LITERATURE REVIEW

Cashless economy isn't the entire absence of money, it's AN economic setting during which product and services area unit bought and acquired through electronic media. As per Ministry of Finance Report (December 2016) on Digital payment, monetary inclusion is one amongst the foremost challenge facing India. As per RBI's

report 'Vision 2018' four pronged strategy specializing in regulation, strong infrastructure, effective super ordinate mechanism and client centricity has been adopted to push adoption of digital payment in India. To review a number of the vital studies area unit conferred below.

BalazsVinnai, general manager, Digital Channels, Misys(April 25, 2016), says that "It is crucial for banks to contemplate new digital channels as a part of an integrated strategy and evolve from initial to second generation digital banking: switching digital from a supporting role, to the first sales and communication channel for banks," says Vinnai. "Reengineering processes around the client isn't simple, however banks should embrace digital banking to remain competitive and relevant."

Sedhirkumarsharma, Vandanalama and NidheGoyal (2015)In their study digital India concept is the main motive to build transparent and responsive system and provide all services to people to electronically and promote digital knowledge.

Piyuth Kumar (2015) shows that in his study to assess the behavior towards cashless transactions system and how far they are adopted to this new world of cashless society.

Sanghita Roy, Dr. IndrajitSinha (2014) .stated that E- payment system in Asian nation ,has shown tremendous growth, however still there has ton to be done to extend its usage. Still ninetieth of the transactions area unit money based mostly. Technology Acceptance Model used for the aim of study. They found Innovation, incentive, customer convenience and legal framework area unit the four factors which contribute to strengthen the E- payment system.

E-payment systems area unit necessary mechanisms employed by individual and organizations as a secured and convenient approach of constructing payments over the internet and at identical time a entryway to technological advancement in the field of world economy(**Slozko&Pello, 2015**).

Rakesh H M &Ramya T J (2014) in their research paper titled "A Study onFactors Influencing Consumer Adoption of Internet Banking in India" tried to examine the factors that influence internet banking adoption.

OBJECTIVES AND HYPOTHESIS

Objective of the Study

- To examine the gender of respondents impact on digital payments.
- To analyze the age of respondents impact on digital payments.
- To analyze the impact of customers education on usage of digitalpayments.
- To analyze the impact of customers profession on usage of digital payments.
- To analyze the impact of customers income status on usage of digitalpayments.

HYPOTHESIS

The following hypotheses were formulated for testing:

H01: There is no significant difference is perceived by respondents for various attributes of digital payment on the basis of gender of respondents.

H02 There is no significant difference is perceived by respondents for various attributes of digital payment on the basis of age of respondents.

H03 There is no significant difference is perceived by respondents for various attributes of digital payment on the basis of education of the respondents.

H04 There is no significant difference is perceived by respondents for various attributes of digital payment on the basis of profession of the respondents.

H05 There is no significant difference is perceived by respondents for various attributes of digital payment on the basis of annual income of the respondents.

RESEARCH METHODOLOGY

The current study is based on primary data collected from 100 respondents from the different parts ofGhaziabad(Indirapuram, vaishali). A well-structured questionnaire was designed to collect the information from the respondentsto study perception of customer towards adoption of digital payment mode. The responses have been collected by means of face-to-face interviews.

SAMPLING PLAN

Sampling unit: In this research the sampling unit was the customers who have been using the digital payment modes.

Sample size: In this survey the sample size decided was 100.

STATISTICAL TOOLS USED

The following tools used for analyze

1. Percentage analysis
2. Chi-square analysis
3. ANOVA (One-Way)

DATA ANALYSIS & INTERPRETATION**Demographic Profile****Awareness of respondents regarding Digital Money**

Awareness of Digital Money	No. of Respondents	Percentage
Yes	99	99
No	01	01
Total	100	100

Age Profile

Age	No. of Respondents	Percentage
Below 18	5	5
18 to 30	45	45
30 to 50	35	35
Above 50	15	15
Total	100	100

Gender Profile

Gender	No. of Respondents	Percentage
Male	65	65
Female	35	35
Total	100	100

Occupation

Occupation	No. of Respondents	Percentage
Salaried People	53	53
Self Employed	25	25
Professionals	15	15
Students	7	7
Total	100	100

Income

Occupation	No. of Respondents	Percentage
Below 100000	12	12
100000-300000	25	25
300000-500000	33	33
Above 500000	30	30
Total	100	100

Education

Occupation	No. of Respondents	Percentage
Primary	15	15
Secondary	23	23
Technicacal	23	23
University	20	20
Others	19	19
Total	100	100

Respondents' preference to Digital Money

Preference	No. of Respondents	Percentage
Trustworthy	45	45
Easy Access	35	35
Multiple Service	20	20
Total	100	100

Frequency of Use CashLess Transactions by the Respondents

Preference	No. of Respondents	Percentage
Daily	40	40
Weekly	30	30
Monthly	20	20
Quarterly	10	10
Total	100	100

Mode of using by Customer:

Mode of using	No. of Respondents	Percentage
RTGS/NEFT	10	10
POS	10	10
Debit/Credit/Rupay Card	30	30
Mobile Banking/Net Banking	20	20
Digital Wallets	30	30
Total	100	100

Factors that influence to choose Digital Money Service:

Preference	No. of Respondents	Percentage
24 hour	27	27
Safe and secure	46	46
Easy mode of transaction	25	25
Others	2	2
Total	100	100

Problems of Cashless Transactions by the Respondents

Problems	No. of Respondents	Percentage
Lack of Security and Safety/ Cyber Crime	40	40
Charges of Online Transaction	10	10
Problem of Internet connection	10	10
Illiteracy	25	25
Lack of Infrastructure	15	15
Total	100	100

Level of Satisfaction in using Digital Money:

Level	No. of Respondents	Percentage
Highly Satisfied	27	27
Satisfied	67	67
Neither Satisfied nor Dissatisfied	5	5
Dissatisfied	Nil	Nil
Highly Dissatisfied	1	1
Total	100	100

CHI-SQUARE ANALYSIS

Table showing the chi-square method and showing the relationship between Gender of the respondents and Customer's preferences to use Digital Money:

Customer's Preference				
Gender	Trustworthy	Easy Access	Multiple Service	Total
Male	32	23	10	65
Female	13	12	10	35
Total	45	35	20	100

The calculated value of chi-square = 2.715

Degrees of freedom in this case = $(r-1)(c-1)$

$(2-1)(3-1) = 2$

The table value of chi-square for 2 degrees of freedom at 5% level of significance is 5.99

The calculated value of chi-square is less than the table value. Therefore, null hypothesis is accepted. It is conclude that there is no significant relationship between gender and the investors' preferences to use Digital Money.

Table showing the chi-square method and showing the relationship between Age of the respondents and Customer's preferences to do Cashless Transactions:

Customer's Preference				
Age	Trustworthy	Easy Access	Multiple Service	Total
Below 18	3	4	0	7
18 to 30	25	10	5	40
30 to 50	14	16	10	40
Above 50	3	5	5	13
Total	45	35	20	100

The calculated value of chi-square = 40.86

Degrees of freedom in this case = $(r-1)(c-1)$

$(4-1)(3-1) = 6$

The table value of chi-square for 6 degrees of freedom at 5% level of significance is 12.59

The calculated value of chi-square is greater than the table value. Therefore, null hypothesis is not accepted. It is conclude that there is significant relationship between age and the investors' preferences to do cashless transactions.

Table showing the chi-square method and showing the relationship between Income of the respondents and Customer's preferences to do Cashless Transactions

Customer's Preference				
Income	Trustworthy	Easy Access	Multiple Service	Total
Below 10000	3	4	3	10
10000-25000	20	10	10	40
25000-100000	20	15	5	40
Above 100000	2	6	2	10
Total	45	35	20	100

The calculated value of chi-square = 7.421

Degrees of freedom in this case = $(r-1)(c-1)$

$(3-1)(4-1) = 6$

The table value of chi-square for 4 degrees of freedom at 5% level of significance is 12.59.

The calculated value of chi-square is less than the table value. Therefore, null hypothesis is accepted. It is conclude that there is no significant relationship between income and the investors' preferences to do Cashless Transactions

ANOVA TEST

Table showing the ANOVA method and showing significant relationship between age of the respondents and Satisfaction level with the service of Digital Money.

ANOVA Table

Satisfaction Level					
	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	(SSB) 2413	3	804.33	2.57	6.59
Within Groups	(SSW) 1249	4	312.25		
Total	(TSS) 3662	7			

Level of Significance: 0.05 (5% significance level)

ANOVA Table value: 6.59

Inference: Since, the observed significance level is greater than the expected significance level. So there is no significant variance between age of the respondents and the satisfaction level with the service of Digital Money.

Table showing the ANOVA method and significant relationship between income of the respondents and level of satisfaction in the service of Digital Money.

ANOVA Table

Satisfaction Level					
	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	(SSB) 2482	3	827.33	2.84	6.59
Within Groups	(SSW) 1162	4	290.5		
Total	(TSS) 3644	7			

Level of Significance: 0.05 (5% significance level)

ANOVA Table value: 6.59

Inference: Since, the observed significance level is greater than the expected significance level. Therefore, there is no significant variance between income of the respondents and the satisfaction level with the service of Digital Money.

Table showing the ANOVA method and showing significant relationship between education of the respondents and Usage of Digital Money.

ANOVA Table

Satisfaction Level					
	Sum of Squares	Df	Mean Square	F	Sig
Between Groups	(SSB) 1209	3	403	3.51	6.59
Within Groups	(SSW) 458	4	114.5		
Total	(TSS) 3662	7			

Level of Significance: 0.05 (5% significance level)

ANOVA Table value: 6.59

Inference: Since, the observed significance level is greater than the expected significance level. Therefore, there is no significant variance between education of the respondents and usage of Digital Money.

FINDINGS**Findings on basis of SIMPLE PERCENTAGE ANALYSIS**

- Majority of people know about digital money. 99% people know and only 1% people do not know about Cashless Transactions that means mostly people have knowledge about Digital Money
- Age Group between 18 to 30 are using 45% Cashless Transactions and in Age group 30 to 50 35% People is doing Cashless transactions this means youngsters are using more Digital Money.
- In our Survey 65% Respondents were male and 35% were Female.

- Salaried People using more Cashless transactions than students and Professionals that means Salaried People use more Plastic Currency or Cashless transactions than students.
- People who are not that much educated are also using Cashless transactions like in this table People of primary and secondary education group is using Cashless Transaction is 38% which is more than People from Universities. So Education does not effect on using Digital Money.
- Income Group 300000-500000 People are using more Digital Money than any other Income Group, it also means Income does not have any effect on using Cashless transactions
- 30% of People is using Plastic currency and Digital Wallets that means People now do not prefer to carry currency rather they use Cashless Transactions
- A Large number of People have fear of lack of security and Cyber Crime or Hacking the accounts .
- 94% respondents were satisfied with Digital Money.

Findings on basis of CHI-SQUARE ANALYSIS,

- There is no significant relationship between gender and the investors' preferences to use Digital Money
- There is no significant relationship between age and the investors' preferences to use Digital Money.
- There is no significant relationship between income and the investors' preferences to use Digital Money.

Findings on basis of ANOVA,

- There is no significant variance between age of the respondents and the satisfaction level with the service of Digital Money.
- There is no significant variance between income of the respondents and the satisfaction level with the service of Digital Money
- There is no significant variance between age of the respondents and the use of Digital Money

SUGGESTIONS

- It is necessary to educate people for cashless payments because major part of India is living in villages with having very less knowledge of Digital India. So it is necessary to make them to understand how to install and use digital payment systems.
- The transformation of the current payment method of cashless may not be same in the future, due to continuous innovation in technology which will bring several new modes of cashless payment system, so awareness program is necessary time to time.
- People suggests the futuristic card should evolve to use biometric ID (finger prints, eye scan etc), it can be extremely difficult to copy, and it will be a very safe option.
- ATM should be setup in every village so that people start using plastic money. It is also suggested to withdraw of surcharge or service charge or convenience fee on card and digital payments which is currently imposed by government, so as to encourage people to use plastic money.
- In India almost 110 million smartphone increase users every year, and Aadhaar-compliant devices with biometric authentication should be built into phones and tablets.

CONCLUSION

This study has made an attempt to understand customer perception regarding digital payment. It was found that people are more comfortable doing with cashless transactions as it is more secure and less time consuming and more over this online transaction also has proof so cashless transactions are safer than cash transaction. Indian economy is transforming cashless economy because more and more people prefer cashless transactions as growth of debit/credit card holders has crossed 37.48M/861M. A large number of businesses, even street vendors, are now accepting electronic payments like Paytm encouraging the people to learn to transact the cashless way. People agree with the government on the usefulness of cashless economy as it helps to fight against terrorism, corruption, money laundering. But it is important to strengthen Internet Security from protection against online fraud so as to encourage people more and more use of Digital Money. Large number of population is still below literacy rate living in rural areas. A financial literacy campaign should be conducted by government time to time to make population aware of benefits of electronic payments.

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CAPTURING THE RELATIONSHIP BETWEEN THE FII AND INDIAN STOCK MARKET

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ABSTRACT

Purpose- The study aims to identify the growing trends of the Foreign Institutional Investment (FII) in India. An attempt has been made to study the relationship between the FII and the NIFTY 50 index returns

Design/ Methodology- The study can be categorized under the descriptive research design. The variables in the study are the closing amounts of the FII and the stock prices ranging from the year 2013 – 2018. The growing trends of FII in the debt market and equity market have been analysed using the graphs. Statistical tools namely correlation and regression analysis has been performed in Excel to study the relationship between the two variables and the impact of FII on the stock returns.

Research Limitation and Future Scope- The study has been conducted using the monthly closing prices and is confined to only one index NIFTY 50. The study with reference to the daily closing prices or another index may provide different sets of results. Also the regression only indicates the dependent and independent relationship and does not guarantee the causation effect.

Practical Implications: Based on the findings, various investors can learn the behaviour of the relationship and impact of FII with the index returns which can further be used to earn above average returns. Also the significance relation between the two suggests that FII is vital to the growth and development of the stock market. This may bring attention of the SEBI to undertake measures to protect the interest of the foreign investors.

Keywords: Foreign Institutional Investment, Correlation, Regression Analysis, t test. Nifty 50

INTRODUCTION

After the economic reforms in 1991, India became the target destination for the foreign investments across the globe. India was hesitant towards foreign investment as its main focus was on self-reliance and improving the current account deficits. To overcome current account deficit, planning committee during 1991, proposed for The New Economic Policy which included three main factors namely Liberalization, Privatization and Globalization. From September 14, 1992 Foreign Institutional Investors (FIIs) were permitted to invest in the primary and secondary markets in shares, debentures and warrants issued by companies which were listed or were in the process of listing on the Stock Exchanges in India. The reasons which have made India an attraction for foreign institutional investors includes positive fundamentals combined with fast growing markets. The investments made by FIIs can also be called 'hot money' because they can be pulled out at anytime. Though during the recent financial crisis, the FIIs were the main cause for large and concerted abolition of capital from the country, but then also they have emerged as important players in the Indian capital market. FII chose India as the destination because India has always scope for good returns for investors, the major 3M's of production i.e., Money, Men and Material are avail at lower costs, ease of trading, transparent mechanisms and tax benefits.

FII is actually the investment made by resident of one country in the financial capital and asset of another country which helps in shaping up balance of payments and facilitates productivity. It is an institution incorporated outside India which is eager to make investment in securities of other countries in which they intend to work. They are registered under Section 2 (f) of the SEBI (FII) Regulations 1995. In India FIIs investment started in September 1992. FII investments were recorded Rs. 2595.10 Cr in 1993 increasing to Rs. 135459.08 Cr. The period from 2008 to 2013 has been unfavorable for the Indian economy and also for the world economy. In the year 2008 the world faced the Global Financial Crisis which saw the world economy going for recession as the USA went for a slowdown. Also during the year 2011 the world faced the Eurozone crisis. Around 13% of the entire market capitalization at NSE in India is contributed by FIIs. The investment made by FIIs has been continuously growing over the years, except the years 1998-99 and 2008-09, during which FIIs sold more than they purchased in Indian stock market.

LITERATURE REVIEW

Prasanna(2008) attempted to find the relation between the investment pattern of the foreign investors with respect to the firm specific characters namely ownership structure, firm and the stock returns and found more inclination of the FIIs towards the companies where the holdings of the promoters are not substantial. Further, it was found that the investment decisions are significantly related with the returns on the share and earning per

share. Srivastav (2013) found that Indian markets are attracting Foreign Investors with the rapid changes in the economic policies of liberalization and globalization. Loomba (2012) in his study attempted to relate the trading behaviour of the FII with the Indian markets and found significant positive correlation. Similar results were obtained for SENSEX and NIFTY movements with respect to the FII by Juneja (2013) in his study from a period ranging from 2003 – 2013.

Srinivas (2016) in his study analysed the impact of FII on the stock market in India from 2008 – 2013 covering both Global Financial and Euro Zone crisis using various statistical tools. The results supported the literature of significant relation and impact of the. Undavia (2016) considered FII as one of the emerging sources in promoting economic integration and large productivity and thus improving the balance of payments position. Gupta (2016) evidenced the increase in FIIs since September 1992 to 1626 at the end of March 2009. Abid and Jhawar (2017) found that the Indian stock markets are both shallow and slender because there are small numbers of companies. A and Kumar (2014) reported significant rise in the huge investment in the capital markets via FIIs and through various sources. Kapoor (2015) evidenced the entering of Portuguese, Dutch, British and French in India. Prasad and Vaishali (2017) attempted to study the nature and pattern of the FII into various segments of the stock market in India and found that FII stands at the second position in the investment after Financial Institutions and majority of their investments flows in the direction of Finance and Banking sector.

RESEARCH METHODOLOGY

OBJECTIVE

The study attempts to identify the presence of relationship between index CNX NIFTY 50 and FII Inflows. Further, it aims to study the impact of the FII Inflows on the stock returns.

HYPOTHESES OF THE STUDY

H₀₁ – There is no relationship between CNX Nifty 50 index and FII Inflows

H₀₂ – The FII inflows does not have any impact on value of CNX Nifty 50.

DATA AND THEIR SOURCES

The study is based on value of CNX NIFTY 50. Variables used in the study are monthly closing prices of the index ranging from March, 2013- 2018 have been taken up for the study from website of NSE and the FII monthly closing values have been taken from the website of Department of Industrial Policy and Promotion.

STATISTICAL TOOLS USED

For studying the relationship between the two variables, firstly correlation has been used. Correlation is a statistical technique that shows how much two variables are related. It is denoted by “r” and its values ranges from -1 to +1. If the value of r is close to +1 and -1 this indicates that the variables are closely correlated.

The formula for the same is given below:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Thereafter, Ordinary least square regression has been applied to study the impact of the FII inflows on the stock returns. Regression attempts to determine the strength of the dependence of Stock returns on FII inflows. The equation for the same has been given below:

Stock Returns = a + b (FII Inflows)

Where, “a” denotes the intercept and “b” denotes the slope (beta).

DATA ANALYSIS

The analysis has been divided into two sections. The first section represents the correlation that measure the strength of linear association between the two variables and the second section regression analysis helps in identifying the dependent and independent relationship between the two.

INTERPRETATION

Section-1: Analysis of Correlation.

For this, Karl Pearson Correlation coefficient is calculated between the two series. Following table 1.1 represents the results of the correlation:

	FII	NIFTY 50
FII	1	
NIFTY 50	0.401626	1

Table-1.1: correlation coefficient

In the above table, the r value calculated is 0.401, which represents the strength of linear relationship between the two variables. This represents positive moderate correlation between the FII Inflows and the Stock Index. This indicates that the two series are associated with each other. However the significance of the results can be checked through p value only. The same has been obtained using Regression table in excel. Following are the results for the same:

SUMMARY OUTPUT					
Regression Statistics					
Multiple R	0.401625593				
R Square	0.161303117				
ANOVA					
	df	SS	MS	F	Significance F
Regression	1	18629820.8	18629821	11.34723	0.001335966
Residual	59	96865906.29	1641795		
Total	60	115495727.1			

In the above table, the p value is less than 0.05 which means the results are significant. Therefore, the hypothesis H_{01} : indicating that there is no relationship between the two variables i.e. FII and Stock Index is rejected. This means there exists association between the two variables.

Section-2: Analysis of Regression

For this, Ordinary Least Square regression has been applied using Excel. Regression has been applied to see the dependency of the Stock market represented by NIFTY 50 index on the FII Inflows.

	Coefficients	Standard Error	t Stat	P-value
Intercept	6984.858984	385.6375093	18.1125	8.91E-26
FII	0.060374954	0.017923051	3.368565	0.001336

From, the above table, following regression equation can be framed:

$$\text{NIFTY 50 Index Price} = 6984.85 + 0.0603 \cdot \text{FII}$$

In the above equation, 6984.85 refers to the intercept with p value less than 0.05 meaning that the hypothesis that intercept is 0 is rejected. Beta i.e. sensitivity of the stock market with respect to the FII inflows is 0.06 with p value less 0.05 indicating that the hypothesis that beta value is equal to 0 is rejected. Therefore, the overall hypothesis H_{02} : There is no impact of FII inflows on the Stock Market Index NIFTY 50 is rejected. This means that stock index NIFTY 50 is dependent on the FII Inflows.

CONCLUSION

From the above analysis the study indicates that the FII and Indian Stock Market are associated with each other. FII Inflows is one of the factors impacting the stock markets. Larger the FII larger will be the prices of the index. Stock Market index are the development indicator of any economy. Stable Markets and return generating stocks attracts more of FIIs.

Development in the economy would attract more of FIIs which in turn will strengthen the base of the economy.

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SCOPE OF DIGITAL MARKETING IN HOTEL INDUSTRY: A CASE STUDY OF SELECT 5 STAR HOTELS IN DELHI-NCR

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ABSTRACT

The advent of social media in the tourism and hospitality sector has brought in a revolution, as a medium to engage and entice the potential customers in a big way. The untapped popularity of social media platforms, being the most influential factor as the word-of-mouth, has called for a student of the market effectiveness of digital marketing media such as Facebook, Pinterest, YouTube, trip advisor, LinkedIn etc. The study attempts to investigate factors responsible for digital brand awareness, their influence on customer perception and the optimum utilization of such tools to leave a long lasting impact on the millennial consumer. Google scholar was used as a search engine to get her literature from different articles and other data sources available. The observations resulting as a part of primary data, accumulated through online survey, supported the coherent sets of literature already present. The research suggests that social media has a direct positive impact, thereby engaging all possible resources in revenue generation.

Keywords: Hotel, Digital Marketing, Social Media, Brands, Customers

INTRODUCTION

Digital marketing is an impactful tool, though not relatively new, but with abundant advantages of being affordable and viral. It carries the potential of spreading brand awareness quickly, without any cultural or social barriers, thereby developing attention amongst massive amount of traffic. The benefits of social media marketing is supposed to be ranging from functional, hedonic and monetary to social and psychological factors, based on several research performed earlier. With specific reference to hotel industry, this tool holds the key to engaging consumers in virtual experiences and recognizing their needs, thereby positively influencing their participation. Digital marketing mediums like Facebook, Instagram, LinkedIn, Pinterest or YouTube, can help Hotels in understanding customer's preferences before, during and after their vacation experience.

The dynamic hotel industry must integrate the potential of attitude-towards-the-ad and concept of attitude-towards-social-media-page to enhance the marketing effectiveness thereby resulting in the generation of potential customers through brand awareness. With the hotels flourishing next to each other, to thrive in this smaller world, the incorporation of social media marketing strategies to engage and lure customers seems to be an apt shift, in different formats such as wikis, blogs, social networks, online channels and reviews, etc.

Brand-building identifies itself to be a set of three stages including cognition, relationship building and business generation. It is imperative for today's business managers to stay up-to-date on technology, customers and social media, in order to direct business and marketing efforts towards meeting and exceeding guest expectations, alongside resolving consumer complaints. It is important for all businesses dealing with vulnerability, to have a strong online presence. Having an aesthetically pleasing portal with useful content relevant to the general audience, colorful images or virtual tours, attracts the online visitors and gets them interested in staying at a facility satisfying their needs.

Implementing a well thought and aptly planned digital marketing program is essential in hotel industry. Presence on just one vertical is not enough; it takes time, effort and professional guidance to open the door of business towards digital marketing strategies. The traffic coming from mobile devices has been on a rise. Having a mobile friendly website can make a huge difference in getting a reservation as a means of revenue generation.

Digital marketing trends have been changing rapidly, making it difficult for the hotel businesses to stay on top. Only a specialist with industry knowledge and marketing background can divert traffic to the site and convert mere visitors taking virtual tours to consumers enjoying actual services. Since there are several strategies for various segments of customers, based on objectives and targets, a variety of digital marketing spheres should be integrated and looped together.

STATEMENT OF PURPOSE

The main objectives of this study are as stated

1. To explore the impact of digital marketing through social media and other platforms, on potential customers and revenue.

2. To identify the various social media tools for digital marketing, their effectiveness and the frequency of their usage for client engagement.
3. To summarize the information regarding the main trends in digital marketing while comprehending the literature.

RESEARCH DESIGN AND METHODOLOGY

Qualitative interviews were undertaken with a specific group of senior hotel executives from 10 hotels, of Delhi-NCR, to gauge their understanding of the digital market strategies, in order to support the literature findings. Their viewpoints were explored towards the return on investment of hotel's online presence, through fact finding enquiries.

Present study also attempts to reveal the perceptions of hotel customer's digital experiences that influenced their attitude and intention towards a hotel brand, by data collected through a structured questionnaire, circulated amongst 150 learned population of Delhi-NCR, via e-mail, considering convenience sampling technique. This generated useful information from 90 respondents.

The secondary data was gathered from books, newspapers, journals, e-journals and articles from trusted sources, related to the field of study. The theoretical part of the research discusses the basics of digital marketing and the influence of social media.

LITERATURE REVIEW

Digital marketing today has become an indispensable part of every business irrespective of its size and type. The increasing role of digital marketing have affected the way businesses promote their offerings to existing as well as new customers. The need for digital marketing has affected the way businesses promote their offerings to existing as well as new customers. The need for digital marketing has been felt like never before in the tourism industry wherein customers have instant access to all kinds of information on the latest offers and best prices. With the launch of internet technology, the rules of marketing have been redefined all over the world. Edelman quoted in 2010 that for marketers, the old way of doing business is unsustainable. It started as a mode of communication and has evolved not just into another source of additional revenue but most importantly, to develop and maintain long-term relationships with the various parties in the market. Every campaign launched digitally can be tracked in terms of its reach, engagement and conversion. This has given a whole new meaning to the marketing research to understand the needs of the customers like never before. Digital Marketing, the promotion of products or brands via one or more forms of electronic media, differs from traditional marketing in that it uses channels and methods that enable an organization to analyze marketing campaigns and understand what is working and what isn't- typically in real time. In order to compete and succeed digitally, the most relevant digital marketing activities include:

- Quality website
- Strong social media presence
- Search engine optimization
- Email marketing
- Content usefulness
- Mobile friendly

Digital marketing today is all about using the internet technologies to reach out to existing and newer audiences and engage with them. The main difference between traditional and digital marketing is the latter's ability to track data about user behavior and campaign performance in real time. (Kaur, 2017)

It is important for all businesses to have a strong online presence. Maintaining an effective website and implementing strong internet marketing techniques, including social media, are great ways to bring in more leads. This is even more significant for hotels, where customers have many options and may not know the area. Since there are many strategies that can be pursued, set your objectives and integrate a variety of measurement systems. (Rojas, 2019)

Our living environment is a combination of online and offline spaces that co-exist together, defining our everyday habitat. In line with the new trends of travelling, there is a dynamically growing demand for special tailor-made offers beyond mass tourism, as conscious consumers expect personalized solutions that answer their individual needs. The rapidly increasing popularity of online offers require quick and user-friendly tourism

product development from the industry. With the arrival of Google's site ranking feature as per internet searches, a fierce competition stays between blogs, tourism recommendation sites and price comparing Online Travel Agent systems. The development of digital services require the identification of the user, information on their individual preferences and a decision based calibration (by Artificial Intelligence). (Martin, 2018)

While social media is a generic term covering different online platforms with various attributes, communication formats and sociability functions, there are certain characteristics that all social applications fundamentally share. In 2008, Mayfield identified five specific characteristics that he believed underline the operations of all social media:

- Participation
- Openness
- Conversation
- Communities
- Connectedness

In terms of advertising on social media, in 2009 Bernoff found that almost 4 out of 5 marketing professionals believe that social media advertising is likely to become more effective than traditional advertising using print and other media. The most pressing challenge however comes in the justification of time and money spent on it versus its effectiveness. Significant proportion of guests interact with and about the hotel before, during and after their stay. This suggests that with individuals who interact at any stage, there is an opportunity to build a dialogue and create loyalty to the hotel and hotel brand. Fans have a greater propensity to purchase, share and engage when they are targeted with marketing offers on social media. (Thomas G, 2016)

Research suggest that social media engagement and advertising do have a positive impact on hotel reservations and revenue generation (Thomas G, 2016). Several studies also contribute to the understanding of consumer behavior in social media (Msallam SA, 2016).

In 2013, Van Djick mentioned that the rise of social media with the dawn of the new millennium has provided new ways for exchanging feedback on products and services. Such event has driven a huge increase in customer empowerment, with customers now having a vast number of instantaneous tools to influence others with their opinions, recommendations or complaints. A brand (name, term, sign, symbol, design) is intended to identify the goods or services of sellers and to differentiate them from those of competitors as shared by Kotler and Keller in 2016. Whereas brand management involves the analysis and planning on how a brand is perceived in the market, a branding strategy identifies which brand elements a company chooses to apply across its various products. A distinct branding perspective is brand building, which has been widely studied with a particular emphasis on the specific case of assessing the impact of social media. Back and Parks in 2003 affirmed that brand building stages are known to have a direct impact on customer relationship in the hospitality industry. Recently social media has also been addressed as a mediator of travel knowledge sharing and coproduction of travel information between community residents and tourists. In 2014, the relevance of social media communities for managing brands was assessed by Davis et al. Their study identified five drivers of brand consumption in social media- Functional, emotional, self-oriented, social and relational (Moro, 2017).

Brand managers need to adapt each brand strategy to benefit the most from social media trends while keeping pace with each company's strategic guidelines. Engagement in social media brand communities leads to positive increase in purchase expenditures and interestingly user generated content exhibits a stronger impact than marketer generated content on consumer purchase behavior. Moreover, the emergence of social media has changed the consumer's role in story telling from that of a passive listener to a more active participant. In the last few years, social media has proven to have a profound impact on brands worldwide. The hospitality industry is no exception for the following rule of thumb:- brands need to incorporate communication through social media and consider the effect that viral e-word-of-mouth has on each individual brand. Similarly, it is expected that research keeps pace with such demand, helping both to understand the phenomena and to offer innovative perspectives on the subjects (Moro, 2017).

The business environment and marketing strategies have gone through big changes due to digitization. As for digital marketing, it is an essential tool for any business. The branding and positioning plays an important role in digital marketing. Online presence gives endless opportunities and ways to share content and attract new customers. The main reason why digital marketing is being used in businesses is the lower cost and reachability compared to traditional marketing. The term digital marketing comes from using an electronic device

(smartphones, computers, tablets, game consoles) to reach customers. In other words, digital marketing means using one or more digital channels to promote a product or a brand. There are 3 ways to make social sharing work for better rankings:-

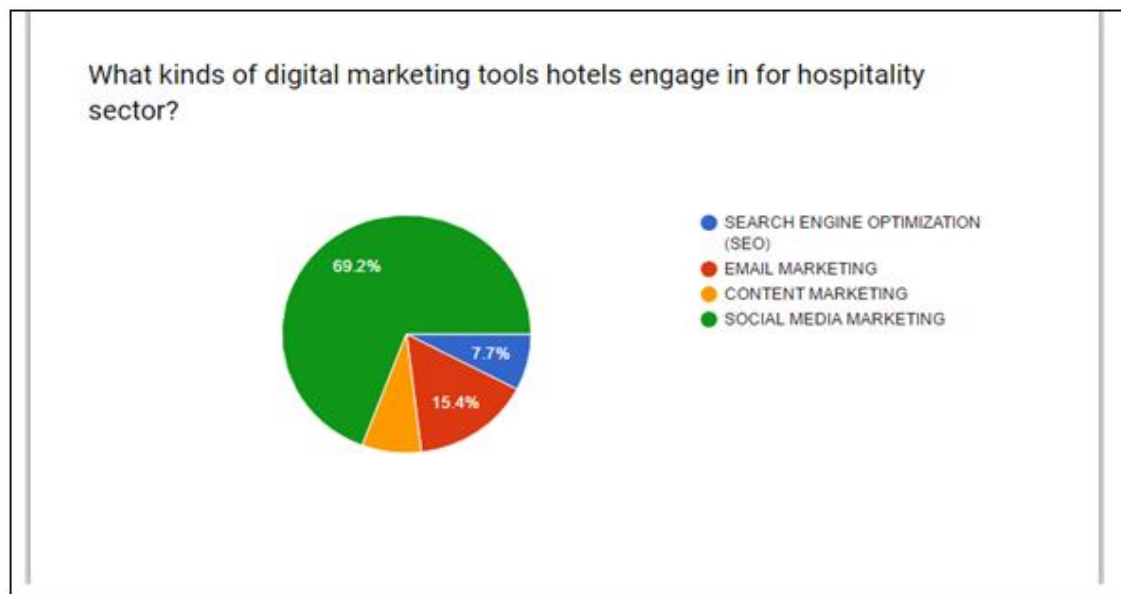
- Clicking the link to interesting content.
- Social Presence.
- People engagement through campaigns.

As worded by Konrath in 2006, the key in digital marketing is to have a strong value proposition, that attracts customers and differentiates from competitors (Taimo, 2017)

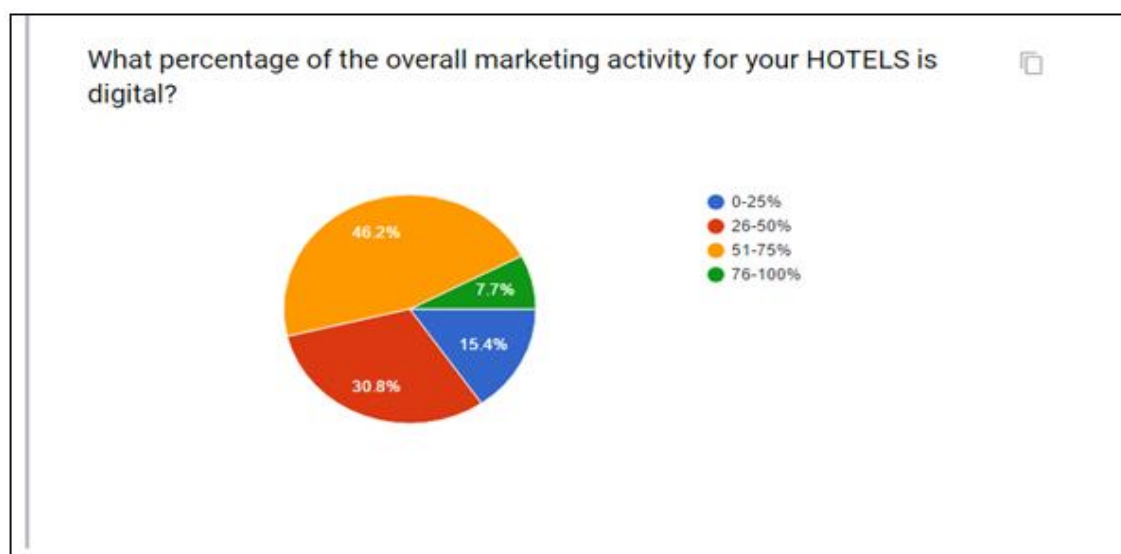
DATA ANALYSIS AND FINDINGS

The findings of this study provide significant insights for the researchers and marketers. The senior hotel executives, interviewed to retrieve useful data to support coherent sets of literature already present, used social media platforms frequently and considered it to be important for both - engagement & advertizing.

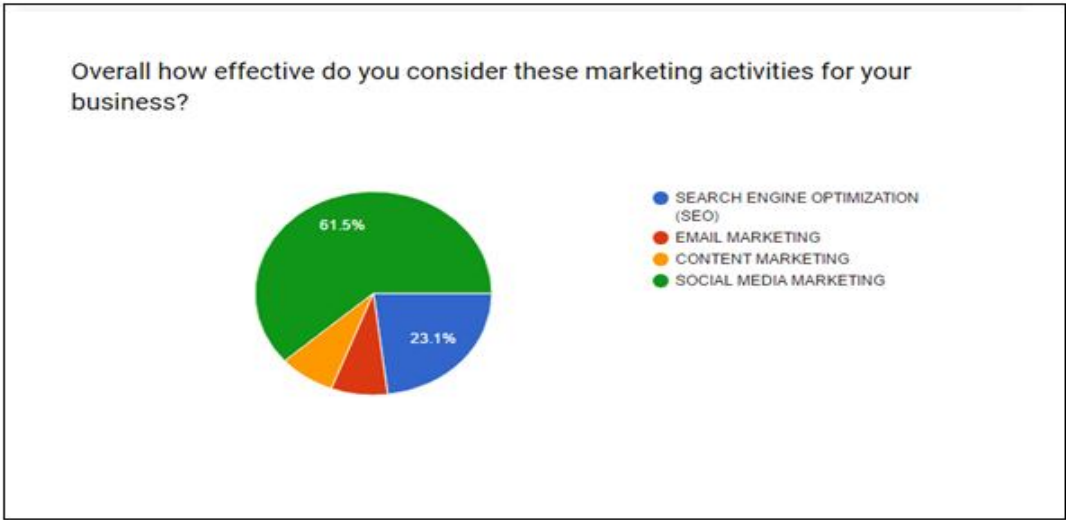
The resulting pie charts of the survey, are shown in the figures and described as under:-



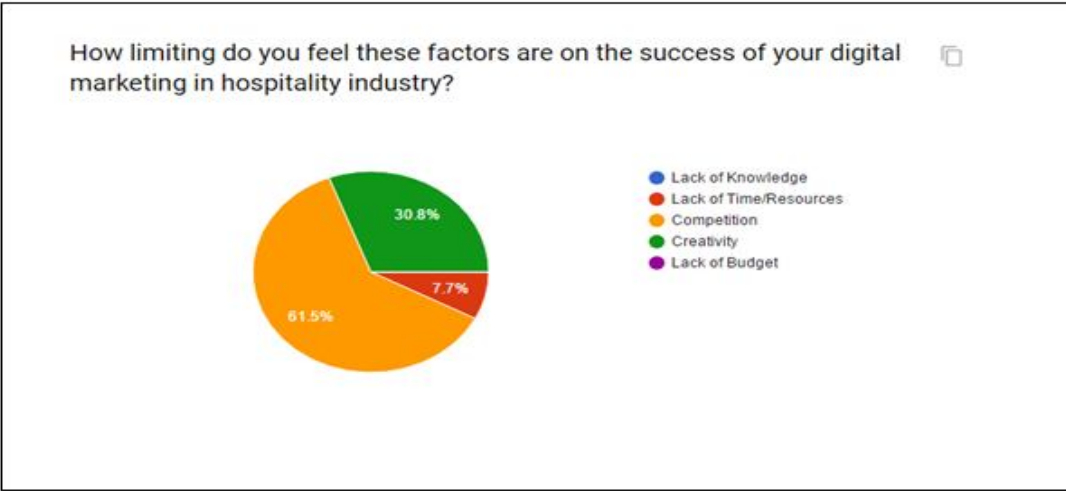
As interpreted from the results, while email marketing forms a miniscule part of the entire digital marketing domain, more focus (around 69 %) is on channelizing the resources through social media.



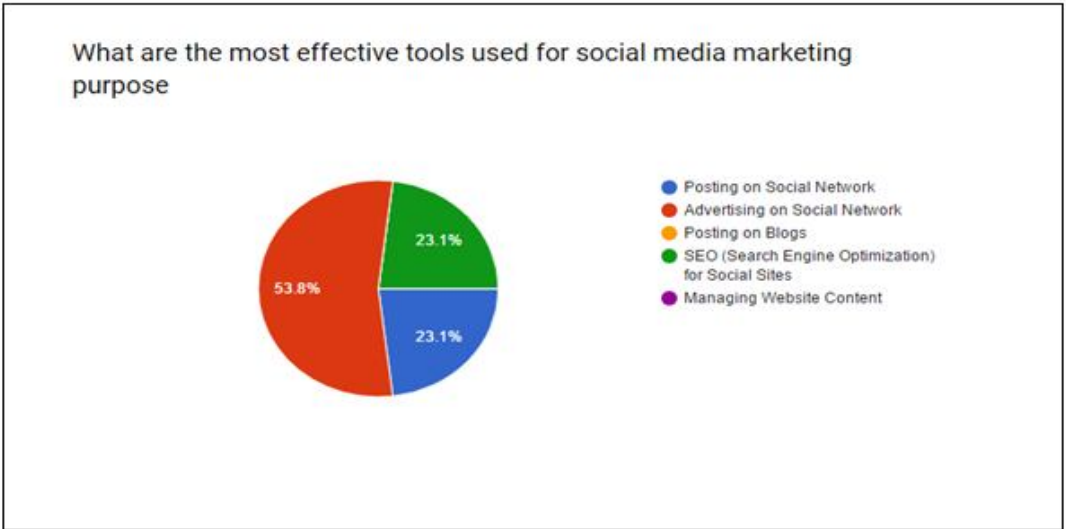
Surprisingly, maximum number of respondents are doing 51 to 75% marketing of their products and services through digital mediums. This clearly indicates that digital marketing is the preferred mode of reaching to potential customers by majority of the hospitality chains.



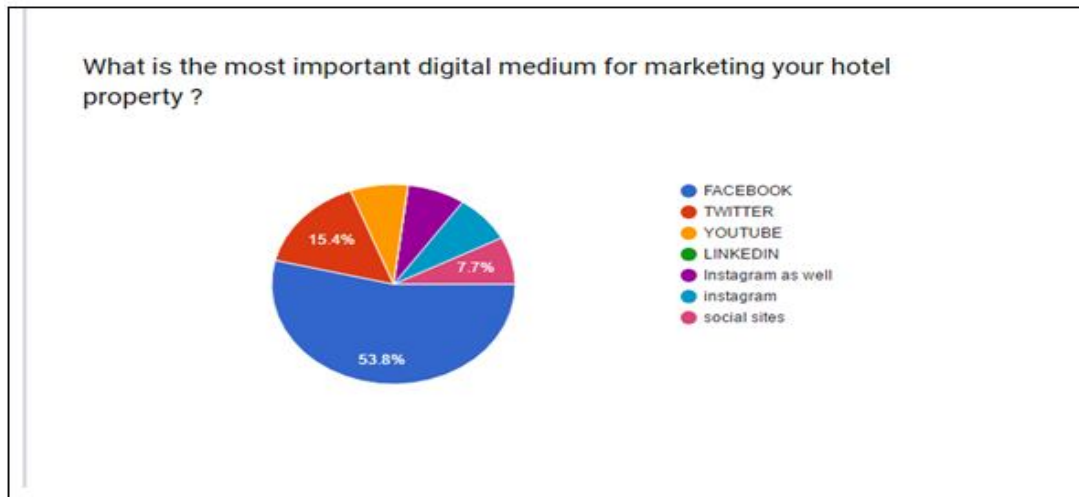
To further our claim, the study highlighted that marketing through social media has been effective with more than 61 % respondents, being the preferential mode. Therefore more emphasis should be given to develop and design campaigns around this platform.



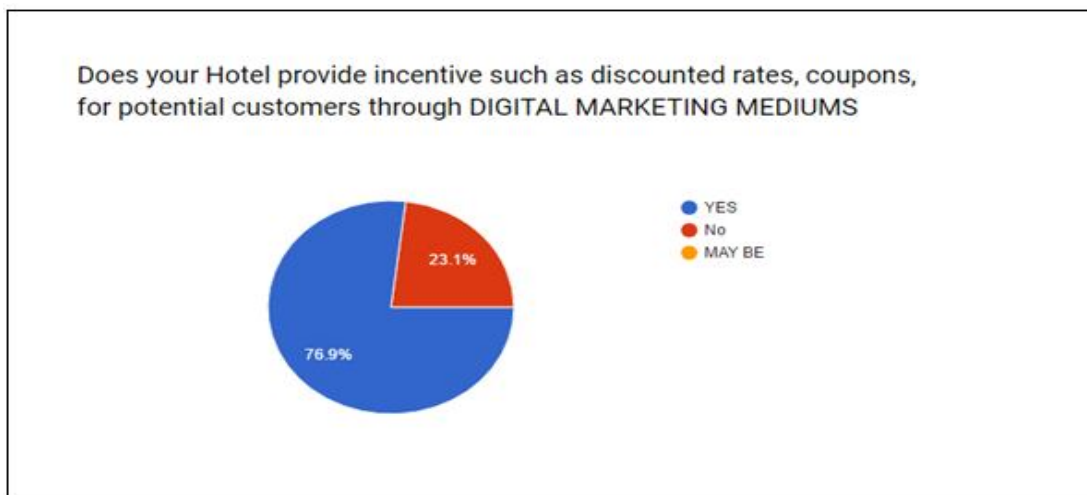
Perhaps the most noteworthy finding stated that even though the digital marketing has been effective through social media, lack of competition on the mentioned platform holds being a limiting factor in the overall success of this medium in hospitality sector.



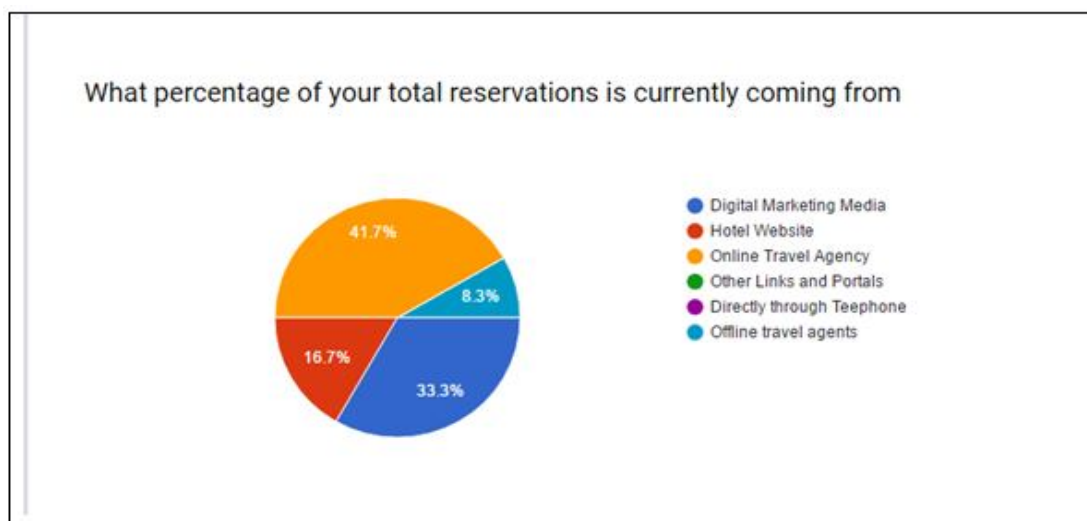
More than 53% respondents believe that advertising through social network are fetching good results and SEO along with posting on social network has come a close second option with 23 % each, respectively, thereby showcasing the popularity and effectiveness of the tools discussed.



Interestingly, as expected, more than 50% of the hoteliers are of the opinion that FACEBOOK is the most important way of marketing any hotel property. Some of the other mediums discussed were Twitter, Youtube, Instagram and other social sites which can be used to promote the property.



Contrary to the popular belief of degrading business, more than 75% respondent hoteliers offer coupons or discounted rates through DIGITAL MEDIA platform, in order to propel sale of their products and services. This also influences the perception and inclination of the customer towards the brand.



As is evident from the diagram, digital marketing mediums have been competing with the OTAs at a pace higher than other mediums. It reflects the increasing popularity and market penetration of the different digital marketing sources, coming at par with the other mediums of making reservations.

CONCLUSION

The results unveiled the impact of digital marketing on the hotel industry has increased by leaps and bounds, as brand cognition directly affects purchase intention. Social media marketing being the most influential factor, the brand interpretation and loyalty has gone from marginal to main stream as the organizations have accepted the relevance of online presence. The research identified that a significant number of guests get engaged and interact with, as well as, about the hotel before, during and after their experience during their stay. Email marketing and Search engine optimization have been consistently portrayed as vital constructs for content marketing. Mobile devices and electronic word of mouth have emerged as relevant focal points to be further exploited and put to business use. It is expected that the research keeps pace with the demand of future business, offering innovative perspectives to the subject.

SCOPE OF STUDY

The study explores the impact of hotel marketing activity on potential online visits converting to reservations, thereby generating revenue. It also attempts to learn the influence of social media platforms and e-word-of-mouth strategies, on the thinking pattern, perception and attitude of the customer towards a hotel brand.

LIMITATIONS

1. Time being a constraint, the limited number of respondents might have answered without giving much emphasis to the importance of question.
2. Sample size represents only a part of the universe and therefore should not be taken as representation of the whole population.
3. The literature review was focused only on the tourism and hospitality sector, thereby neglecting any relevant findings reported in broader journals covering management and technology titles.

RECOMMENDATIONS**This exploratory study raised certain important recommendations**

1. With the advent of online platforms, brand positioning calls for a detailed study as it is a highly dynamic subject.
2. Brand strategy differentiation on the online portals and social media platforms, can guide hotel brands to adopt distinct approaches of marketing their product.
3. The constant evolvement of new marketing tools and channels deserve a closer study to be at pace with the future of hotel industry.

FUTURE RESEARCH

The study calls for specialized research, eventually leading to the other vibrant issues surrounding the topic. This shall help identify the main trends and gaps in research, contributing to the exploration of such an innovative domain of brand building.

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DIGITAL BANKING AND CUSTOMER SATISFACTION IN DISTRICT GHAZIABAD

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ABSTRACT

Purpose: The study on digitalization at Bank is aimed at knowing the what factors lead the customers to choose Digital banking services, and to know what are the reasons due to which the customers hesitate to choose digital banking services

Methodology/Approach: This project was focused on the study and analysis of Data collected through questionnaires and personal interaction with the Customers through who walked in the bank located in Delhi NCR.

Research Tool: Descriptive study with judgmental and convenience sampling on around 100 customers was done. Ranking and weighted average method was applied to interpret the results.

Findings: The result shows that digital banking has significant impact on customer's satisfaction level, all the dimensions like effectiveness, customer privacy, and quick responses contribute almost 85%.

Practical implications: Recommendations to management to do efforts in increasing the safety and security of online banking accounts, they should provide more reliable services to customers to make them more confident in using digitalization services. More effective system should be developed for quickly resolving the issues of customers, focus on these factors will tend to help in retaining the existing customers and in gaining prospective customers.

Research Limitations: Researchers made contribution in understanding the magnitude of digitalization on customer satisfaction. As the study was limited in Delhi NCR only other researchers can further investigate without taking geographical boundaries in consideration as digital banking is widely used all over India.

Value: This paper made a pioneering effort to analyze the customer satisfaction in digitalization of banking industry, it also focused that digital banking is important domain to satisfy the customers as it is directly related to customer satisfaction.

Keywords: Digital Banking, Customer satisfaction, Delhi NCR

INTRODUCTION

In the development of economy and growth of country, banking sector plays a vital role. Bank acts as a backbone in the financial sector of any economy. Important activities like development of infrastructure, providing liquidity, funding new industries are performed by the banks. It also generates employment, provides funds to profitable investment avenues and powers the country in International transactions.

As the advancement of technology people are more diverted into digitalization of their banking activities. In this internet plays a vital role. Banking sector has also made themselves by digitalizing their services.

Traditional banking systems have become inconvenient to the customers as banks were providing services only for eight hours and customers get irritated in visiting the various branches physically. Other issues related to gazette holidays and Sunday. Nowadays banks are providing services 24 X 7. Online services attracted customers as it is very easily accessible and convenient with flexible operating hours.

Quality of services also plays an important role through which the banks can create competitive advantage. Quality of services signifies the customer's orientation towards digitalization. It depends upon the service facility of banks to migrate the customers towards online banking service. It should include easily accessibility, reliability, usefulness, privacy issues, security and responsiveness.

Customer satisfaction is considered as a major tool for the performance of any organization whichever industry is it service, banking managing satisfaction of customer is the fundamental objective. According to various researches customer attitude and behavior towards digitalization depends on various factors such as demography, education level, behavior and easy accessibility. However once they adopt digitalization other factors such as privacy security, trust become significant factor. While today's digital banking is filled with amazing innovations, it hasn't always been this easy — in fact it took a long time to get this far. Digital banking facilities have many features and capabilities. The features fall broadly into several categories:

(A). A bank customer can perform non-transactional tasks through online banking, including-

- Viewing account balances.
- Viewing recent transactions.
- Downloading bank statements, for example in PDF format.
- Viewing images of paid cheques.
- Ordering chequebooks.
- Download periodic account statements.
- Downloading applications for M-banking, E-banking etc

(B). Bank customers can transact banking tasks through online banking, including

- Funds transfers between the customer's linked accounts.
- Paying third parties, including bill payments and third party fund transfers
- Investment purchase or sale.
- Loan applications and transactions, such as repayments or enrolments.
- Credit card applications.
- Register utility billers and make bill payments.
- Financial institution administration.
- Management of multiple users having varying levels of authority.
- Transaction approval process.

This paper is categorized into five sections:

- Introduction
- Literature Review
- Methodology
- Results
- Policy Implication and Conclusion

LITERATURE REVIEW

Vandana Tandon Khanna & Neha Gupta (2015) The study shows the factors such as Technology acceptability, safety, availability, user friendliness and accessibility highly depends on the demographic profile of the population size. Most of marketing decision in terms of enhancing the effectiveness of delivery channels can be taken by considering these factors.

Neena Brar & Jaspreet Singh (2012) While investigating all the variables and the responses by consumers, this study reveals that the perception of the consumers can be changed and can be made positive by awareness program, friendly usage, fewer charges, proper security, and the best response to the services offered.

Rahmath Safeena et.al, (2011) in their research work "Internet Banking Adoption in an Emerging Economy: Indian Consumer's Perspective" analyzed the factors influencing the consumer's adoption of internet banking in India and hence investigates the influence of perceived usefulness, perceived ease of use and perceived risk on use of Internet Banking.

According to **Ozuru et al. (2010)** "The importance of electronic payment system in any country can never be over emphasized, due to the dramatic transformation in technological advancements that is being experienced by the global financial industry".

Harris (2007) observed that Internet Banking is Becoming "Need to Have" service. E-banking is one of the most recent technological innovations, which is becoming a need for every common man. It uses Internet as a medium for delivery banking services. Today, banking is not limited to branches, where a person goes to bank for withdrawal of cash or request a statement of accounts or to deposit a check. An inquiry or transaction can be

handled online without any reference to the branch any time through Internet Banking. Benefits of internet banking include fast speed, convenient, cost effective, all time accessibility, and flexibility.

Srinivasan (2007) investigated that in specified region of Karnataka, channel convenience, channel control and channel security plays an important role in the selection of channels. Some regions still see people who are struck to branch banking and are not ready for a change in mindset. Across Telebanking was not popular since it was not perceived as a safe and convenient channel.

Sayar et. Al (2007) discussed that the developments in information technology and the subsequent evolution of internet banking have fundamentally changed the ways in which banks implement their business and consumers conduct their everyday banking activities. The results confirm the influence of internet trust on risk perception and consumer attitudes towards internet banking. The results confirm the influence of internet trust on risk perception and consumer attitudes towards internet banking. Propensity to trust is a determinant not only for interpersonal relationships but also for trust in technological systems. This is not a representative study.

OBJECTIVES AND RESEARCH QUESTION

- To study the various facet of customers towards quality of service in digital banking
- To study the relationship between the customer's behavior and service quality in digital banking
- To study the impact digitalized services towards customer satisfaction.

RESEARCH METHODOLOGY

Hypothesis: Null hypothesis (H0) There is no significance relation between income of customers and perception regarding digitalization of banking industry.

Research design: The research work in this paper is descriptive in nature, it was planned to study in areas other than metro cities to find out whether the customers are using digitalization facilities or banks or not and are they satisfied or not, so the targeted persons were middle class people of Ghaziabad District Therefore, research is carried out by using judgmental and convenience sampling method and a sample of around 100 persons who are having accounts in private or public sector banks are selected. The data has been collected with the help of questionnaire.

Type of questionnaire: Structured

- i) Multiple Choice Questions
- ii) Scales

Type of questions: Limited probing

In this study, limited probing was used as respondents were prompted for more information (i.e. to enlarge, clarify or explain their answers) only in a few questions.

Time dimension: Cross-sectional

In this study, cross-sectional design was used as it involves collection of data from respondents only once.

Research Technique: Survey

Respondents were interviewed using a predesigned questionnaire.

Contact Method: Personal survey, Mail survey and Internet survey

Sample Design

- Population: collection of data from walk in customers in bank
- Sample element: respondents with different occupations (private sector employees, government sector employees, student, self-employed, business)
- Sample unit: Respondents above 20 years of age
- Sample size: number of respondents 100
- Sampling procedure: Simple Random Sampling. Every element was selected independently of every other element, and the sample was drawn by a random procedure from a sampling frame.

DATA ANALYSIS AND INTERPRETATION

Survey Results

S. No	Question	Interpretation
1	What is your preferred mode of operation for banking?	85% of the respondents prefer digital banking whereas only 15% prefer offline banking i.e., banking in person at the branch.
2	How often do you use internet per day?	Among 100 respondents 76% use internet more than three hours daily, 4% use internet three hours daily, 5% use internet two hours daily and 15% use internet one hour in a day
3	Do you use online banking facilities?	Most of the respondents prefer online banking services. About 91% respondents support online banking services and only 9% respondent's support offline banking services.
4	How often do you use online banking?	Most of the people do not need the services of banks regularly. They may transact with banks on monthly basis, weekly or occasionally
5	What services do you use through online banking?	Out of 100 respondents, majority of 82 respondents said they use Fund transfer and Bill payments service the most. 59 respondents said they use it for recharge, 27 respondents said they use it for applying for a Credit Card while 25 said they use it to apply for Insurance. 15 respondents said they use it apply for a loan and the remaining 10 said they use it for Other services.
6	Where do you access online banking?	In all 100respondents, there are maximum of 76respondents who chose to log in to their Digital bank service from their Home, 59 respondents also chose to log in from Office PC, 67 respondents chose to log in from the mobile applications, 20 respondents choose to use the net banking kiosk present at banks, and the remaining 2 respondents are the ones who never used these services

Rate the following online banking services

Weighted Average Method

WEIGHT	1	2	3	4	5	15
SERVICES	Poor	Fair	Average	Good	Excellent	Weighted Total
Fund Transfer	0	2	33	116	295	446
ATM Banking	1	2	33	120	285	441
Balance Enquiry	0	2	15	128	310	455
Request DD	0	4	69	176	155	404
Bill Payment	0	2	33	88	330	453
Online Shopping	0	2	30	84	340	456
Online Recharge	0	0	30	92	335	457

Rank Table Based on Weighted Score

SERVICES	WEIGHTED SCORE	RANK
Fund Transfer	29.7	5
ATM Banking	29.4	6
Balance Enquiry	30.3	3
Request DD	26.9	7
Bill Payment	30.2	4
Online Shopping	30.4	2
Online Recharge	30.46	1

By weighted average method of determining rating of digital banking services, it is found that customers rank online recharge and online shopping 1st and 2nd respectively followed by balance enquiry and requesting a demand draft is ranked 7th.

REASONS FOR ADOPTING ONLINE BANKING

Most of the respondents felt that the “24*7 ACCESSIBILITY” provided by the internet banking is the highest motivating factor for an individual to use internet banking and rest prefer “EASE OF USE”, the fact that it “SAVES TIME AND SPEED” and others chose net banking because it is mobile, convenient, and cost effective. Only 10 respondents do not use net banking due to security issues.

FINDINGS

- 85% of the respondents prefer digital banking whereas only 15% prefer offline banking i.e., banking in person at the branch
- Most of the respondents use digital banking weekly
- 72% respondents feel that digital banking will prove to be a better substitute to traditional banking in near future
- 47% respondents are extremely satisfied with digital banking.
- Most of the respondents claim that lack of awareness, less computer facilities and no internet connection, security threats are the main causes for non-accessibility of online banking by majority of people in their area.
- 24*7 accessibility along with convenience, ease of use, mobility, and time and cost-effectiveness are the main benefits which online banking users have seen among other options.
- Funds transfer and Bill Payment are the most used online services. Applying for loan, credit card and insurance are still lagging behind in terms of digital banking due to absence of a sales executive that leads to inadequate knowledge of the services offered
- Respondents have rated Online shopping and Online recharge used through digital banking facilities the highest and requesting a demand draft being ranked the lowest.

CONCLUSION

The research paper tried to contribute by investigate whether the customers are satisfied with digitalization or not. It has been found still approximately 15% of people are not using online services due to lack of knowledge about computer, feel insecure in using e banking services. Many told that after the demonetization they become more adhered to these e services as they found it easy to use by sitting at home only. Suggestions for banks specifically to the semi urban areas to generate more awareness among account holders and generate confidence among them regarding the security and privacy. After the study it has been analyzed that tangibility, reliability, responsiveness and assurance plays a major role in winning customer confidence. It is also suggested that banks should take more measures to enhance the security and safety of online accounts; they should provide more trustworthy services to make them more confident and comfortable.

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ANALYSIS OF INDIAN LIFE INSURANCE COMPANIES ON FINANCIAL GROWTH OF INDIAN FINANCIAL SYSTEM

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ABSTRACT

India contains a distributed financial sector undergoing speedy growth, each in terms of strong growth of existing monetary services corporations and new entities getting into the market. The arena contains commercial banks, insurance firms, non-banking monetary firms, co-operatives, pension funds, mutual funds and different smaller money entities. The banking regulator has allowed new entities like payments banks to be created recently thereby adding to the kinds of entities operative within the sector. However, the monetary sector in India is predominantly a banking sector with industrial banks accounting for quite sixty four per cent of the whole assets control by the financial system. The monetary services sector has been a very important contributor to the country gross domestic product (GDP) accounting for nearly six per cent share in 2014-15. The govt of India has introduced many reforms to liberalise, regulate and enhance this trade. The govt and reserve bank of India (RBI) have taken numerous measures to facilitate easy accessibility to finance for small, little and Medium Enterprises (MSMEs). These measures embody launching Credit Guarantee Fund scheme for small and little Enterprises, issuance guideline to banks relating to collateral needs and putting in a small Units Development and finance Agency (MUDRA). With a combined push by each government and personal sector, India is doubtless one among the world's most spirited capital markets.

Keywords: financial sector, industrial banks, insurance firms

INTRODUCTION

In this paper, the researcher highlights the origin and growth of the concept of Insurance. This paper deals with however the life assurance business was experienced throughout the pre and post nationalization period and additionally however it's being experienced when the implementation of the IRDA Bill in India and therefore the opening of the personal sector within the life assurance business within the post liberalisation period. Further, it highlights the origin and growth of the SBI life assurance. The secondary information available in numerous books, journals and articles printed in newspapers are used within the preparation of the paper.

MARKET SIZE

The size of banking assets in Asian country reached US\$ one.4 trillion as on August twenty one, 2015 and is predicted to touch US\$ 28.5 trillion by FY25. Banks total credit stood at US\$ one trillion. The Association of Mutual Funds in India (AMFI) information show that assets of the mutual fund business have hit an all-time high of regarding Rs 12.5 trillion (US\$ 188 billion) as of August 2015. throughout April 2014 to Feb 2015 amount, the life assurance trade recorded a brand new premium income of Rs 90,579 crore or US\$ 13.6 billion. the final insurance trade grew at a rate of nine.3 per cent at Rs 0.84 trillion (US\$ 12.6 billion) in 2014-15 from Rs 0.77 trillion (US\$ eleven.6 billion) in 2013-14.

India's life assurance sector is that the biggest within the world with regarding 360 million policies, that are expected to extend at a compounded annual rate (CAGR) of 12-15 per cent over ensuing 5 years. The insurance trade is going to hike penetration levels to 5 per cent by 2020, and will prime the US\$ one trillion mark within the next seven years. the whole market size of India's insurance sector is projected to touch US\$ 350-400 billion by 2020. India is that the fifteenth largest insurance market within the world in terms of premium volume, and has the potential to grow exponentially within the coming years. life assurance penetration in India is simply 3.9 per cent of GDP, quite doubled from 2000. a quick growing economy, rising financial gain levels and rising life expectancy rates are a number of the numerous favorable factors that are probably to boost growth within the sector within the returning years. Investment corpus in India's pension sector is anticipated to cross US\$ one trillion by 2025, following the passage of the Pension Fund regulative and Development Authority (PFRDA) Act 2013.

EVOLUTION OF INSURANCE

The origin of insurance is lost in antiquity. The earliest traces of insurance within the ancient world are found within the sort of marine trade loans or carrier contracts including a part of insurance. proof is on record that arrangements embodying the thought of insurance were created in Chaldaea and Asian country at quite a early amount. within the Rig-Veda, the foremost sacred book of India, references were created to the concept

‘Yogakshema’ additional or less comparable to the well-being and security of the individuals. Turning to insurance within the fashionable sense, the first ways of transferring or distributing risk were experienced by Chinese and Babylonian traders as long ago because the third and 2nd Millennia B.C, severally. Chinese merchants travel treacherous stream rapids would distribute their wares across several vessels to limit the loss because of any single vessel wreck. The Babylonians developed a system that was recorded within the far-famed code of king. C. 1750 BC, and experienced by the first Mediterranean sailing merchants. If a businessperson received a loan to fund his cargo, he would pay the lender a further add in exchange for the lenders guarantee to cancel the loan ought to the shipment be stolen or lost at sea, the codes of Hummurabi and of Manu had recognized the wisdom of provision for sharing the longer term losses. However, there's no proof that insurance in its present form was experienced before the twelfth century.

HISTORY OF INSURANCE IN INDIA

In India, insurance contains a deep stock-still history. It finds mention within the writings of Manu (Manusmrithi). Yagnavalkya (Dharmasastra) and kautilya (Arthasastra). The writings speak in terms of pooling of resources that might be re-distributed in times of calamities like fire, floods, epidemics and famine. This was most likely a pre-cursor to modern-day insurance. Ancient Indian history has preserved the earliest traces of insurance within the kind of marine trade loans and carriers contracts. Insurance in Asian country has evolved overtime heavily drawing from different countries, England specifically. 1818 saw the arrival of life assurance business in Asian country with the institution of the Oriental life assurance company in Calcutta. This company but failing in 1834. In 1829, the Madras just had begun transacting life assurance business within the Madras presidency. 1870 saw the enactment of the British Insurance Act and within the last 3 decades of the nineteenth century, the Bombay Mutual (1871), Oriental (1874) and Empire of India (1897) were started within the Bombay Residency. This era, but was dominated by foreign insurance offices that did sensible business in India, particularly the Albert life insurance, the Royal Insurance port and therefore the London Globe Insurance and therefore the Indian Offices were up for exhausting competition from the foreign firms.

In 1914, the govt of {india|India|Republic of India|Bharat|Asian country|Asian nation} started publication returns of insurance firms in India. The Indian life insurance companies Act, 1912 was the primary statutory measure to regulate life business. In 1928, the Indian Insurance companies Act was enacted to modify the govt to gather applied mathematics data regarding each life and non life business transacted in India by Indian and foreign insurers together with provident insurance societies. In 1938, with a vision to protective the interest of the insurance public, the sooner legislation was consolidated and amended by the Insurance Act, 1938 with comprehensive provisions for effective management over the activities of insurers.

The Insurance modification Act of 1950 abolished principal agencies. However, there have been an oversized variety of insurance firms and therefore the level of competition was high. there have been additionally allegations of unfair trade practices. the govt of India, therefore, determined to nationalize the insurance business.

An ordinance was issued on nineteenth January, 1956 nationalizing the life assurance sector and therefore the life assurance corporation came into existence within the same year. The LIC absorbed 154 Indian, sixteen non Indian insurers as additionally seventy five provident societies - 245 Indian and foreign insurers all told. The LIC had monopoly until the late 90s once the insurance sector was reopened to the personal sector.

NATIONALIZATION OF INSURANCE IN INDIA

There were 154 Indian insurers, 16 non Indian insurers and 75 provident societies carrying on life insurance business in India till 1956. Life Insurance business was mainly concentrated in cities and in the better off the segments of the society. There was no uniformity among them in functioning. Hence, the Government thought to nationalize the industry. The root causes to nationalize the insurance business in India are listed below.

- No security to the investment of the policyholders.
- Unsatisfactory performance of private business in this sector.
- Lack of surety of getting claims by policyholders.
- Liquidation of insurance companies due to bankruptcy.
- Diversion of the resources raised through policyholders to other
- Business activities by the management.
- Serious complaints of misuse of funds by many insurance companies.

- Requirement of substantial funds for launching five year plans.
- Extending the benefits of life insurance to rural areas.

LIFE INSURANCE OF INDIA

Life Insurance is that the quickest growing sector in India since 2000 because the Government allowed non-public players and FDI up to 26per cent. insurance in India was nationalised by incorporating the insurance Corporation (LIC) in 1956. All personal insurance corporations at that point were taken by the LIC. In 1993 the govt. of the Republic of India appointed the RN Malhotra Committee to put down a road map for the privatisation of the insurance sector. whereas the committee submitted its report in 1994, it took another six years before the legislation was passed within the year 2000 legislation amending the Insurance Act of 1938 and governance the Insurance regulative and Development Authority Act of 2000. a similar year that the recently appointed insurance regulator-Insurance regulative and Development Authority IRDA-started provision licenses to non-public life insurers.

What are various bonuses in life insurance plans?

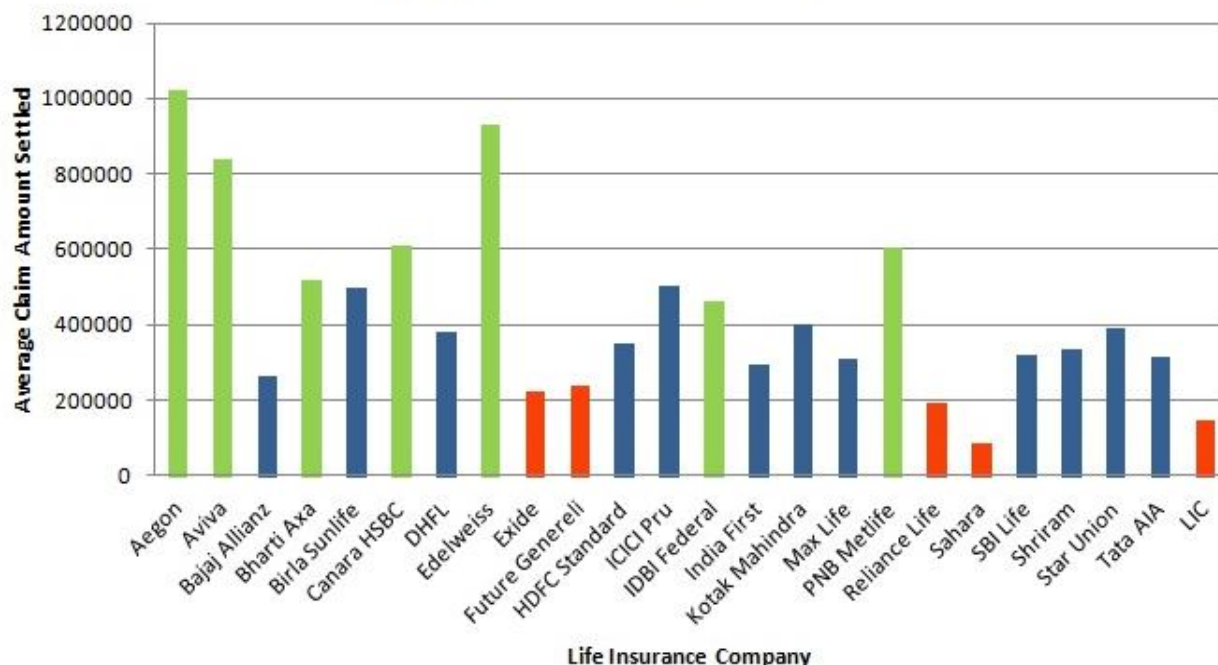


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ENTRY OF PRIVATE SECTOR IN INSURANCE

This millennium has seen insurance return a full circle during a journey extending to almost two hundred years. the method of the reopening of the sector had begun within the early Nineties and also the last decade and additional has seen it been opened well. In 1993, the govt. started a committee underneath the situation of R.N. Malhotra, former Governor of the rbi, to propose recommendation for reforms within the insurance sector. the object was to enrich the reforms initiated within the money sector. The committee submitted its report in 1994 whereby, among different things, it suggested that the personal sector be permissible to enter the insurance business. They prompt that foreign corporations be allowed to enter by floating Indian corporations, ideally a joint venture with Indian partners.

IRDA Claim Settlement Ratio 2016-17
Average Claim Amount settled by Insurance
Companies
(www.basunivesh.com)



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LIFE INSURERS IN PRIVATE SECTOR

Following is the list of private life insurance companies granted permission by IRDA

- SBI Life Insurance
- Metlife India Life Insurance
- ICICI Prudential Life Insurance
- Bajaj Allianz Life
- Max New York Life Insurance
- Sahara Life Insurance
- Tata AIG Life
- HDFC Standard Life
- Birla Sunlife
- Kotak Life Insurance
- Aviva Life Insurance
- ING Vysya Life Insurance
- Shriram Life Insurance
- Bharti AXA Life Insurance Co Ltd
- Future General Life Insurance Co Ltd

- IDBI Federal Life Insurance
- AEGON Religare Life Insurance
- DLF Pramerica Life Insurance
- IndiaFirst_Life_Insurance_Company
- Star Union Dia-ichi Life Insurance Co. Ltd
- Edelweiss Tokio Life Insurance Company Ltd

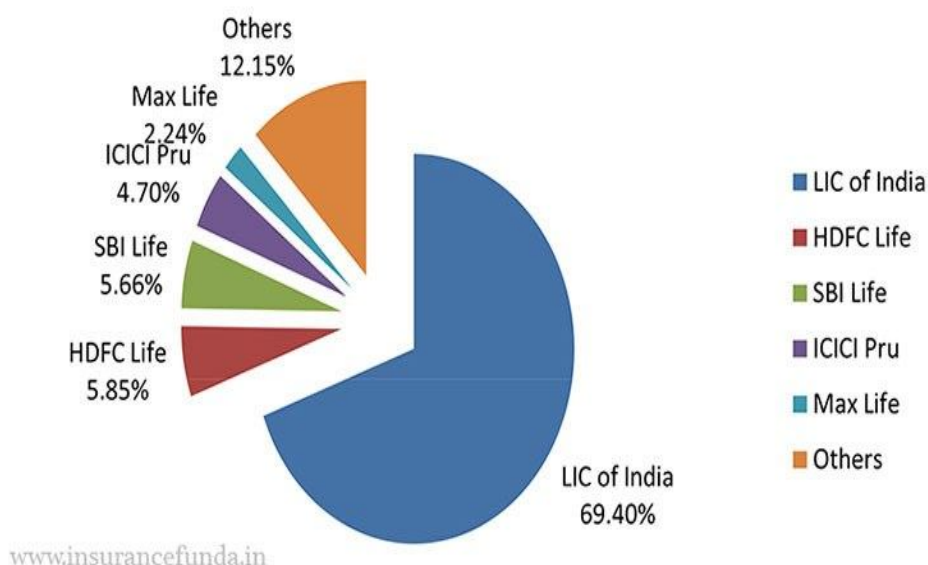
MARKET STRUCTURE

It is important to understand the market structure of life insurance sector. LIC as a dominant player has gained an increase of 88% in new business premium income. Despite of uncertain environment, total premium of Life Insurance industry increase by 66% to Rs 62,361.34 crore in first six months of the current fiscal from Rs 39,046.59 crore in same period last fiscal. In 2010, life insurance companies witnessed new business premium collecting during first five months. According to LIC's recent filing with IRDA the total value of its investments from policy holders funds, as at June 30 2010, stood at Rs 867,935 crore as agencies Rs. 717,002 crore on June,2009, the value of investments in equity share has become 183,233 crore. Public sector Life Insurance Corporation of India (LIC) has clocked a robust 72.53 per cent jump in fresh premium collection in January 2009 leaving behind major private sector players, most of whom have posted negative growth in the month as compared to January 2008. Data released by insurance sector regulator IRDA shows that the first year premium of the life insurers for the period of December, 2010 is again predominantly in favour of LIC. Herein mentioned are some statistics given by IRDA regarding the individual single premium of several life insurers in December 2010 :- 1. Bajaj Allianz - 77.26 crore 2. ING vyaas - 2.58 crore 3. Reliance Life - 80.26 crore 4. SBI life - 248.54 crore 5. Tata AIG - 14.02 crore 6. HDFC standard - 136.72 crore 7. ICICI prudential - 251.97 crore 8. Birla Sunlife - 9.73 crore 9. Aviva - 21.57 crore 10. Max New York - 25.15 crore 11. Met Life - 33.86 crore 12. Shriram Life - 44.90 crore 13. IDBI federal - 21.11 crore 14. Star Union Dai-ichi - 44.98 crore 15. LIC - 1774.43 crore

These are some top companies and there premium collected in December 2010 which clearly depicts that LIC has lucrative market dominance and other private players have a small market share. Such figures explain that LIC is a dominant entity and can influence competition in market negatively due to the regulation of the regulatory body and the government.

The Latest Market Share of all the Life Insurance companies operating in India

Market Share of Life Insurance companies 2017-18



Source: Internet

ORIGIN OF SBI INSURANCE

The SBI insurance may be a venture between the bank of India and also the Cardif sa of France. The SBI insurance is registered with an authorised capital of `500 crore and a paid up capital of `350 crore. The SBI owns 74 per cent of the full capital and Cardif the remaining 26 per cent. state bank of {india|India|Republic of india|Bharat|Asian country|Asian nation} enjoys the biggest banking franchise in India. together with its seven associate banks, the SBI cluster has the matchless strength of over 14,000 branches across the country, the biggest within the world. Cardif may be an entirely in hand subsidiary of the BNP Paribas, that is that the euro Zone's leading bank. The BNP is one in all the oldest foreign banks with a presence in India dating back to 1860. it's nine branches within the metros and alternative major cities within the country.

The Cardif may be a spirited insurance firm specialising in personal lines like long-run savings, protection merchandise and individual insurance. it's additionally been a pioneer within the art of selling insurance merchandise through business banks in France and twenty nine additional countries. The SBI insurance's mission is to emerge because the leading company giving a comprehensive vary of Life Insurance and pension product at competitive costs, making certain high standards of client service and world category operational potency. The corporate plans to create the insurance buying method fast, easy and supported well-informed judgment. In 2004 the SBI insurance became the primary company among personal Insurance players to hide thirty large integer lives.

ORGANIZATIONAL SET UP OF SBI LIFE

The structure set-up of the SBI Life is working with a five-tier structure. It consists of the Central Head office, Regional office, the realm workplace, the Divisional workplace and also the Branch Offices. The Central Head workplace is located at mumbai. It performs the activities that are associated with designing and development, analysis and surveys, investment of funds and additionally framing and administering the principles and laws of the corporate. Next to the headquarters, there are 2 classes of Zonal Offices Zone-1 and Zone-2 underneath the management of that Regional Officers are functioning. At present, there are nine regional offices underneath Zone-1 and nine regional offices underneath Zone-2. There are 629 offices across the country equipped with dedicated employees strength of 7300 (approx) team members. the corporate was distinctive as much because it opened one hundred thirty five branches whereas the complete business was consolidating acquiring. All the branch offices work towards the goal of the corporation. The Divisional officers take care of the activities of the branches within the areas assigned to them and management the operating of the branches. they provide directions to the branches from time to time for achieving the specified results. virtually each district has a minimum of one branch workplace of the corporate. The branch workplace is that the basic production unit of the corporate.

HIGHLIGHTS OF THE COMPANY

Balancing profitability and growth, despite powerful external conditions, the SBI insurance has denote a record profit of `366 Crores increasing by thirty three per cent and picked up a complete premium of `12,912 Crores, growing by twenty eight per cent over the year 2009-10. The new business premium collection stands at `7512 Crores, showing an interesting increase of seven per cent over the year 2009-10. This growth was complimented by a growth in renewal premium collection rising by seventy eight per cent to `5340 Crores in year 2010-11 from `3002 Crores in year 2009-10. reflective superior potency in business operations, the SBI Life maintained an expense to Gross written premium (GWP) of six.84 per cent. the corporate grew at a gradual pace, increasing the branches by one hundred thirty five and also the variety of staff by 1313.23 per cent of the full lives lined by the SBI Life came from the agricultural phase, testifying the company's approach towards insurance inclusion. in addition, 70.683 lives lined by the corporate came from the underprivileged social sector, resulting in the corporate extraordinary the minimum social and rural restrictive norms.

At the SBI Life, the corporate maintains adequate liquidity, thanks to sufficiently massive flow of funds compared to the outflow. the corporate diversifies the chance by incorporating variety of re-insurance corporations and distributing the company's portfolio among them. As per the IRDA regulation the corporate takes into thought the rating of the re-insurers to attenuate default risk. The demographic assumptions are supported the company's expertise on a best estimate basis, and sure changes are incorporated in these assumptions. Market assumptions are supported a mixture of the present market conditions and sure future trends. so the SBI Life has been able to maintain adequate financial condition margins. Further, the corporate adopts stricter margin levels than the restrictive margin of one hundred fifty per cent to effectively mitigate the chance of restrictive breach in addition as utilize the funds in a good approach.

Table-1: Workforce composition on the basis of age

Sl. No.	Age (Years)	Number of Employees	Percentage
1.	20-25	732	10.03
2.	26-30	2822	38.24
3.	31-35	1978	27.13
4.	36-40	984	13.49
5.	41-45 years	776	10.64
Total		7292	100

Source: Annual Report of SBI Life Insurance 2017- 2018

The following table explains the workforce composition of the SBI Life on the basis of qualification.

Table-2: Workforce composition on the basis of qualification

Sl. No.	Qualification	Number of Employees	Percentage
1.	Graduate	4242325	58
2.	Post Graduate	2769	37.97
3.	Engineering	126	1.73
4.	Legal Qualification	78	1.07
5.	Chartered Accountant	32	0.44
6.	Others	131	1.79
	Total	7292	100

Source: Annual Report of SBI Life Insurance 2017- 2018

SBI Life workforce strength stands at an impressive figure of 7292 employees as on 31st March 2018 showing a robust growth of 22 per cent over the previous financial years. SBI Life has drawn more than half of its human capital needs from the insurance sector itself, thereby hiring experienced insurance professionals. With the average age of employees at 32 years, the employees strength is a suitable blend of fresh blood and invaluable expertise.

CONCLUSION

During the analysis, I found many incidences creating it evident that LIC may be a dominant market player with quite seventieth of market. twenty two of the personal insurers had managed the next growth at seven-membered against a pair of within the previous period, however they cumulatively lost 6 June 1944 market share to the LIC, the sole public sector insurance company. The majorly belongs to 54 with quite seventy you look after market share in relevancy alternative personal player market Dominance might not be intrinsically wrong underneath competition Act however abuse of dominance is wrong. With major market share there appears a ground that the market doesn't give for A level enjoying field within the market. Level enjoying field is to be provided for a good competitive surroundings that the commission undertakes to try to to. Sovereign guarantee of presidency to state owned LIC is giving it associate unfair advantage to create trust in customers thanks to that LIC includes a major insurance market share. This paper concisely describes the evolution and history of insurance and also the insurance legislation in India. The emergence of IRDA and its rules and rules to insurance business were additionally mentioned. This paper additionally signifies the origin, achievements and structure started of SBI life. The SBI life offers kind of insurance merchandise to satisfy the wants of various variety of customers. By step by step extending its services to customers, the SBI life has become a multi- dimensional organization these days among the personal insurance companies.

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DIGITAL ENVIRONMENT: TRANSFORMING BUSINESS TO MEET DIGITAL AGE

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ABSTRACT

Digital Environment is a broad terminology which means capsulation of Digital, Social and Electronic Media. In this contemporary time, marketers are faced with new challenges and opportunities where they are resorting to digital mediums for the expansions of their business and customer reach. Digital marketing in simple words is the use of electronic media for attracting customers and promoting products and services into the market. This research focuses on the importance of digital marketing for both marketers and consumers. We base our analysis on a single in-depth case study on India's pioneering food ordering and delivery company – 'Swiggy' and will shed light on the digital marketing strategies and use of social media by the company for business promotion & expansion and customer satisfaction.

Keywords: Digital Environment, Digital marketing, Customer satisfaction, Social media, Business Promotion.

INTRODUCTION

Information Technology has transformed the way people work. The word 'Digital' has unleashed yet another revolution which is changing the way business buy and sell products and services. Since the time of evolution in 1900s and 2000s there is a paradigm shift from paper based transactions to fully electronic organisations. Brands and businesses are on a high utilization of technology and digital marketing for their marketing.

Digital marketing is an umbrella term for the marketing of products or services using digital technologies, mainly on the Internet, but also including mobile phones, display advertising, and any other digital medium.

Business organisations are doing marketing campaigns on various digital platforms like Facebook, Instagram, YOUTUBE etc. Advertising and marketing on the web is picking up in new and unique ways. There are many sites which can offer goods and services through one of the websites that already get a lot of traffic.

This nascent way of enticing the consumers through digital, social and electronic media is called as Digital Environment. . Digital Environment is an important technique in creating a customer base and increasing sells and profit margins of the company as companies can use social media and other electronic media platforms to distribute their messages to their target audience without paying anything to the publishers, distributors or any other type of middleman typically involved in the traditional form of marketing.

In this research we base our analysis on a single in-depth case study of an India's leading food delivering company Swiggy which has successfully completed four working years in India. Swiggy was started in Bangalore city with a Moto to deliver food to food lover spread across the various cities in India. This organization delivers food from different restaurants and food joints to the defined address of the customers. Swiggy has a very streamlined process totally based upon a digital system where within a single request they deliver food on time without fixing any minimum order limit upon the customers.

LITERATURE REVIEW

Digital Environment is a broad term that refers to various promotional techniques deployed to reach customers via digital technologies. Digital environment embodies an extensive selection of service, product and brand marketing tactics which mainly use Internet as a core promotional medium in addition to mobile and traditional TV and radio.

Digital Environment promotes the products or services into the market. The main objective of digital environment is to attract customers and allowing them to interact with the brand through digital media. Through digital platforms consumers can easily access information without the limitation of place and time.

Digital Environment is one type of marketing being widely used to promote products or services and to reach consumers using digital channels. Digital Environment extends beyond internet marketing it also includes mobile phones (both SMS and MMS), television and radio advertising, search engine marketing, social media marketing and other prevalent form of digital media.

By the creation of digital environment, consumers becomes more aware and informed, they lookout for recommendations, feedbacks by the other consumers, friends and association etc before buying or availing any product and services.

The invention of various digital medium has taken a positive mass acceptance television, radio and other social media and E-commerce platforms. Dominos, Pizzahut McDonald's, etc various food chain uses online channel to reinforce brand messages and relationships. They have built online communities for children, such as the Happy Meal, kids meal website with educative and entertaining games to keep customers always close to themselves.

The primary advantage of creating a digital environment is that it reduces the costs and enhances the reach. In comparison with the face to face sales digital environment typically have lower cost advantages as well as high reach, it has fasten up the process of business by quick dissemination of information and with more quicker sell. (Watson et al. 2002; Sheth & Sharma 2005).

To understand the concept of Digital Environment more deeply we will study the business strategy of "Swiggy" which is a food ordering and delivery solution for the food lovers based on the concept of digital marketing. The organisation is based at Bangalore in India. The company follows a model in which it provides a single window for ordering from a wide range of restaurants and have their own exclusive nature of taking orders from customers, contacting restaurants and delivering it to customers. Swiggy was founded by Nandan Reddy, Sriharsha Majety, and Rahul Jaimini an alumni of IIT Kharagpur in August 2014.

In August 2014, the duo rolled out the online food ordering and delivery startup Swiggy along with Rahul jaimini the company began its journey with six delivery executives and 25 restaurants on its platforms. Within the span of three years it has scaled up with over 6,000 delivery executives across India and more than that 8 cities like Delhi-Ncr, Bengaluru, Hyderabad, Chennai, Kolkata and Pune.

The company's marketing strategies consists of both online and off line marketing campaigns. It promotes its campaigns via Facebook, Twitter, YouTube, Pintrest, Instagram etc. The delivery executives use smart phones and takes the order through their App powered by an algorithm for an efficient way of delivering food. Consumers can also discover popular restaurants and track their food orders in real time. Swiggy from time to time broadcasts different schemes and offers by advertising in different social media platforms. And as the time is succeeding the user base and foodie lovers are on a high increase of downloading this App and ordering more orders through Swiggy.

LEADING FOOD DELIVERING APPS IN INDIA

On the Basis of:	Swiggy	Zomato	Food Panda	Uber Eats
Founded On	2014	2008	2012	2014
Revenue	442 Crore	339 Crore	62.16 Crore	50 Crore
Valuation	1.3 Billion Dollar	2.5 Billion Dollar	650 Million Dollar	120 Billion Dollar
Actual Daily Order	35,500	25,000	30,000	18,000 – 20,000
Area of Reach	25 Cities	25 Cities	10 Cities	20 Cities

OBJECTIVES

To show the various elements of digital environment

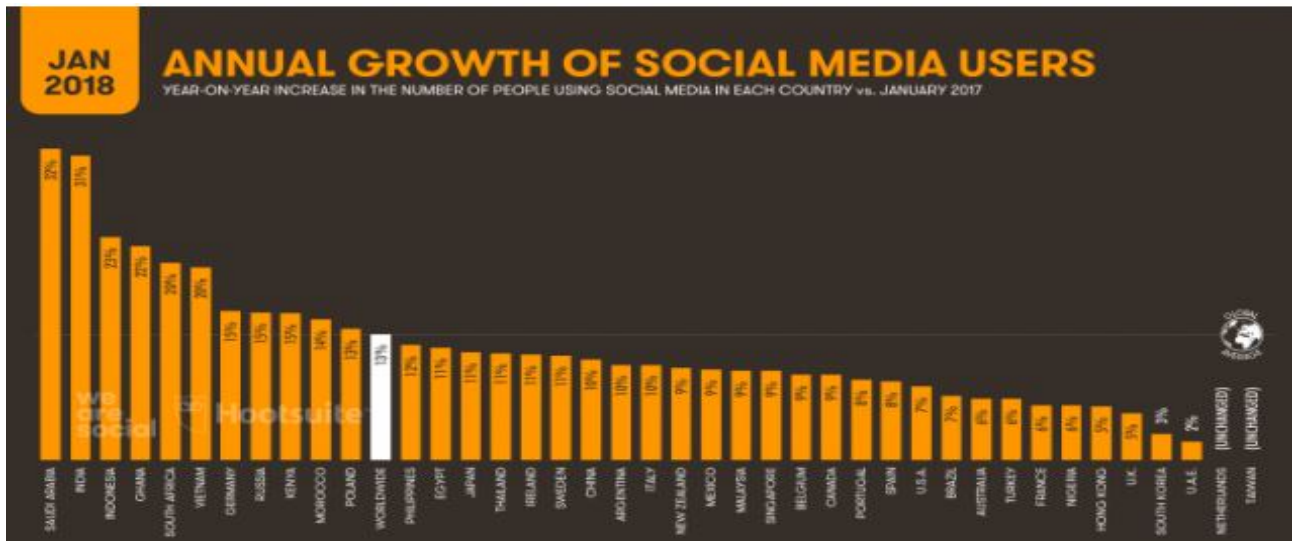
- To discuss the effects of digital environment on the firm's sales and other activities
- To understand the benefits of digital environment to the customers.

RESEARCH METHODOLOGY

- **Secondary source:** We have collected the data from magazines, journals, data published in financial statements of the firms, newspaper and articles. For the purpose of this study, we have selected one the leading food delivery chain "Swiggy" which has created a digital environment to sell their products to customers. The Collected data and information has been organized, explained and analyzed. This study shows results in descriptive way.

SOCIAL MEDIA A CATALYST FOR DIGITAL ENVIRONMENT

There is a global increase in the social media usage around the world. In 2018 a key statistical study by Hootsuite digital report shows that the world's burden on internet, mobile and social media usage has increased significantly. The use of social media in countries like India, Indonesia and South Africa are on a high increase by more than 30%. While countries like U.A.E, South Korea and UK the technological increase in these countries is comparatively slow by 5% only.



Another study shows the total burden of digital users around the world. The number of internet users base in 2018 has counted around 4.021 billion with an increase of 7 percent year on year. The number of social media users in 2018 has counted around 3.196 billion on an average increase of 13 percent. While the count for the active mobile social users goes somewhere around 2.958 billion. Most of the people more often likes to access various social media sites through their mobile phones, around 52% (+4% year-on-year change) chose mobile phones as their first preference to access different social media platforms while Desktop systems have taken second place with only 43% of the people sharing things through desktop down by 3% from the last year data.



VARIOUS ELEMENTS OF INVOLVED IN DIGITAL MARKETING



BENEFITS OF CREATING A DIGITAL ENVIRONMENT

We now have to accept that the value of a venture is no longer multiples of the top line revenue, but the combined value of the venture's customers. In fact, we found that the best customer care of the industry becomes the standard by which all others are measured. Besides recurring revenues, there are other ways a networked organization can increase a venture's bottom line.

➤ **Improved Customer Service**

Being networked means you are able to offer outstanding service to all your customers, allowing them to easily interact with your venture 24x7x365. Using Web-based self-service applications, customers can receive personalized products and services each time they visit. When all of your systems are integrated, your organization will always be equipped with accurate, timely information necessary to quickly respond to customer needs and queries. This includes product demonstration, simulations, automated order acceptance, new product training, and e-learning.

➤ **Increased Customer Satisfaction**

By offering improved customer service, you increase customer satisfaction. You will know who your customers are, what they want, and how to respond to and even anticipate their needs. And, with a completely integrated venture, you will deliver your products and services faster and cheaper than ever before. By offering improved customer service, you increase customer satisfaction. You will know who your customers are, what they want, and how to respond to and even anticipate their needs. As a completely integrated venture, you will deliver your products and services faster and cheaper than ever before. And satisfied customers will share their satisfaction to other potential customers, thus facilitating the catalysis sales approach we discuss in previous Articles.

➤ **Lower Operating Costs**

As a networked enterprise not only are you more efficient, but you realize unprecedented savings as well. Taking full advantage of ICT (i.e., facilitating self-service for your customers, employees, and business partners over the Internet) you will significantly cut costs in every area of your business, including procurement costs, selling costs, reduction in inventories, financial management, human resources, and data processing.

➤ **Better Quality Products and Services**

Being networked means that you not only lower operating costs, but actually improve the quality of your products and services. With improved customer intelligence you know what your lead users and best customers want. You have access to suppliers around the world that bid for your business, which allows you to pick and choose based on quality, price, and date of delivery. And because your value chain is completely integrated (customers to suppliers and suppliers to customers), your quality of service also improves. You deliver exactly what is needed, when it is needed. You can work online with your suppliers to facilitate supplier-managed inventory, providing products and services faster and cheaper than ever before and even help manage recalls.

➤ **Greater Business Efficiency**

Your entire networked enterprise becomes more efficient. Your systems are integrated, processes streamlined, and everyone is sharing the same accurate, timely information. You can realize greater business efficiency when you integrate all of your systems to create one comprehensive, connected value chain. You can shorten buying times or accelerate the revenue events, have suppliers deliver parts and inventory on a just-in-time basis. And you can streamline your administrative processes using self-service applications, which is helpful in managing your outsourcing business partners.

➤ **Better Business Intelligence**

When your supply chain, operations, and customer-facing systems are integrated, it gives you a new, extended enterprise supported by suites of integrated, Internet-enabled applications. With this digital "executive dashboard" you can employ the information generated by these systems in real time, which will help you run your operations and more effectively capture and retain customers. You are now able to deliver insight throughout the organization, supply logistical information in real time to all stakeholders, discover opportunities quickly, better understand business risks, and better align operations with corporate objectives.

➤ **Increased Market Coverage**

With your Web site on the Internet, you instantly have a global audience. No matter where your headquarters is located, your venture is now accessible to the entire world. Your Web site will enable you to sell more effectively to large marquee companies, to make limited explorations into other markets, and to support global business initiatives.

➤ Fewer Administrative Errors

As part of a networked enterprise, your employees, customers, and suppliers can all perform transactions themselves using Web-based self-service applications. No more data entry clerks. No more lost paperwork. Transactions are now processed quicker, cheaper, and much more accurately. This self-service eliminates intermediaries and delays, significantly reduces administrative errors, accelerates billing and accounting procedures, lowers stakeholder communication costs, and helps deliver critical documents to professional service providers, such as your law firm.

➤ Increased Competitiveness

You will be able to operate in a global economy, giving your customers what they want when they want it. Staying ahead of the curve means you are providing personalized products and services at the lowest possible price. You are accessible 24x7x365. You have a 360-degree view of your venture and a comprehensive view of your customers and your space. You have suppliers bidding for your business. You will have the business intelligence to make accurate, timely decisions and the ability to monitor its impact across the enterprise. Your employees are focused on relationship building, improving service, and benefiting the venture. You are more competitive than ever before by improving the relationships with suppliers and partners, promoting the image of your venture and can even speed joint product development programs.

FINDINGS

- The study concluded that in today's time the use of digital channel of communication is highly increasing whether buying a product or taking any services.
- The cost efficiency and diversity of digital channels facilitate marketer frequent and interactive communication with their customers.
- Digital channels like Internet, email, mobile phones and digital television offer new prospects to cultivate new customer relationship.
- Mobile based applications are the most used digital channel of communication followed by website and social media platforms.
- Each and every stage of product buying decision making process right from 'need recognition' to 'post purchase' was 'significantly' affected from digital marketing communication with 'evaluation' being the most affected stage.
- The results of the study confirmed that digital environment is capable of even triggering the need recognition in high involvement product and services category.
- The results also established that consumers feel positive towards digital communication, get affected from other customers' reviews and express their post-purchase feeling over digital platforms.
- However, the study also confirmed that although customers appreciate the usage of digital channels throughout the decision making journey, still they don't buy much of the products and services.

CONCLUSION

Digital Environment has become essential part of strategy for many companies. Nowadays, even for small business owner there is variety of affordable and efficient ways for marketer to promote his/her products or services. Digital environment has no boundaries. Customers use a variety of platforms to buy products and avail services. Therefore, organization can use mobile based App, smartphones, televisions Ads, Multimedia games, digital billboards, social media campaigns, SEO (search engine optimization), videos and other mediums to promote company products and services. Digital environment may succeed more if it considers user needs as a top priority. Companies should create innovative customer experiences and specific strategies for media to identify the best path for driving up digital environment performance.

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THEORY OF MANAGEMENT OF SERVICES, NETWORK, AND ENVIRONMENT IN A UTILITY CLOUD

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ABSTRACT

In this paper, pervasive computing permits the user to connect to the network and receive any service anyplace any time. there's uncertainty in pervasive surroundings in terms of reliableness, availableness and trust. Pervasive environments contains totally {different/completely different} service suppliers providing similar services with same practicality however possess different criteria. Pervasive computing has several potential applications, like health care, business, communications, social networking, home care, environmental observation, and intelligent transport systems. Improved service delivery with smart quality, raised client satisfaction, increased agility and reduced prices are the necessities of pervasive computing. a straightforward service choice situation, once it's extended straight forwardly to sensible applications, provides rise to raised overhead, raised service choice time, undesirable service choice, poor measurability and also the system is unreliable.

Keywords: environments, business, communications

INTRODUCTION

The social network services have hugely grown throughout the recent years and have a promising future ahead. Social Networking will be outlined because the set of services provided by a company to the larger community. The social networking sites have the characteristics like constructing a community inside a bounded system, articulating an inventory of different users with whom to share a connection, viewing and traversing their list of connections created by others within the social networking system. these days several social networking sites are unit provided by varied organizations that support same or totally different sort of services. These organizations will be classified by their goal of providing the services like skilled, personal, gaming and then on. FaceBook, Twitter, LinkedIn, MySpace etc are unit a number of samples of the popular social networking sites. Social Networking has gained quality in spite of age, profession and region.

Many organizations are unit coming back forward with wide range of fascinating social networking services. indeed most of the social network services are unit nearly identical and also the users choose the services supported public perceptions; this trial and error methodology generally provides lower level of satisfaction to the users. the choice of the service provided by the social networking sites by the user is influenced by individual user perspective and also the cluster perspective. the choice of the service is additionally influenced by the gender, attitude, privacy concern, age. Therefore, discovering and providing the simplest social network service supported the user's interest is absolutely a challenge. Discovering a group of possible social services and choosing the foremost applicable social network service supported the user preferences will be sculpturesque as a multi-criteria deciding drawback. during this chapter, associate degree economical, user driven service choice framework for social networking services is proposed adopting PROMETHEE methodology. The experimental results on overhead, work deduction time, average delay have also been obtained. The results show that the planned frame work is effective.

REVIEW OF LITERATURE

In this section associate degree exhaustive study of 3 previous works drained this space is concisely mentioned with relevancy their limitations as well as their planned frameworks. Firstly, Hwee (n.d.) planned a framework generalizing his findings found as results of finding out only 1 lyceum within the whole of Singapore and generalize the finding. The sample size isn't enough illustration of all the various colleges in Singapore. The author known key factors of trust, comfort level, command of language, attitude towards work and image, as further factors that may influence the adoption of Social Networks.

Secondly, Venkatesh et al. (2003) combined eight technology acceptance models to propose a framework called the Unified Theory of Acceptance and Use of Technology (UTAUT). This model encompasses the subsequent factors performance expectancy, expectancy effort, social influence, facilitating conditions and behavioral intention. additionally to those factors different moderators (gender, age, voluntaries, and experience) were wont to live the influences on the factors. although intensive work was drained this space the subsequent setbacks were identified: lacks different key discourse factors once it involves the utilization and implementation of social networks. . Indicators like policy and culture and financial support weren't mentioned

within the work of Venkatesh et al. (2003) and also the authors were silent on the acquisition and implementation factors.

Finally, the work given by Monguatosha et al.(2011) discusses 2 crucial factors additionally to the present factors on the UTAUT model. In their work, budgeting and accountability (BA) and structure culture (OC) was another as further factors that might influence the utilization of SN's adding up to facilitation conditions. The Technology Acceptance Model (TAM) was utilized in the proposition created by Monguatosha et al.(2011).

FRAMEWORK FOR SOCIAL NETWORK SERVICE SELECTION

The social network organizations are clustered in groups based on their objectives. Each group (G) consists of a set of social network organizations. In general

$$G_n = \{O_{n1}, O_{n2}, \dots, O_{nm}\}$$

where n is the number of group and m is the number of services provided by a single organization. The social network organizations and Users that are available in a particular group are handled by Social Network Service Authority SNSA1 . The communication between Social Network Service Authority's takes place through Master Social Network Service Authority MSNSA . The Fig. 1 shows the proposed framework for social network service selection. The Social Network Service Authority consists of Service Registration Unit, User Registration Unit, Social Network Service (SNS) Selection Unit and Social Network Service (SNS) Delivery Unit. Each social network organization furnishes the services it wishes to provide and registers it with the service registration unit.

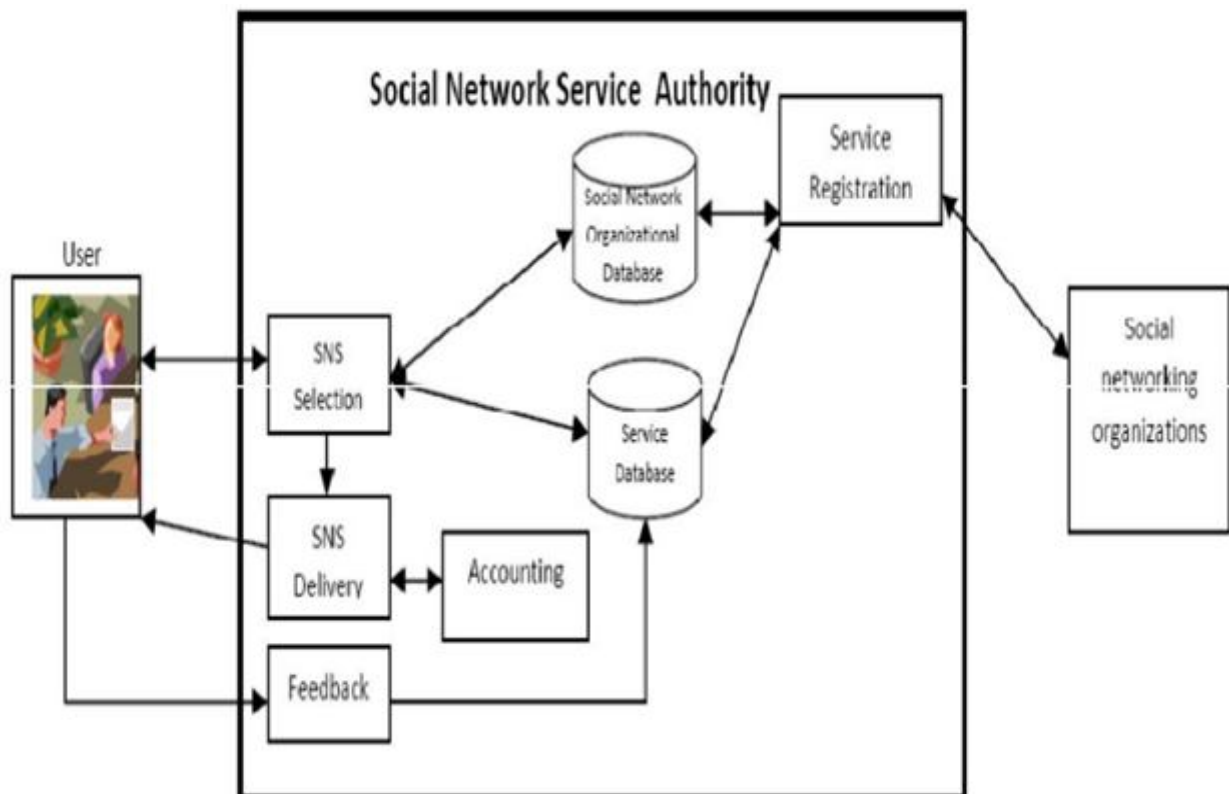


Fig-1: Proposed Framework for Social Network Service Selection

Table-1: Social Network Organizational Database

O_ID	O_Name	S_ID	S_name	Re	Se	Pa
1	O_Space	11	Musical	0.97	0.2	.98
1	O_Space	12	Bike race	0.97	0.2	.98
1	O_Space	13	cloud computing community	0.97	0.2	.98
2	O_Gamer	21	Virtual forest	0.5	0	0.4
2	O_Gamer	22	Musical	0.5	0	0.4
2	O_Gamer	23	Bike race	0.5	0	0.4
3	O_Profe	31	Cloud computing community	0.5	0.1	0.3
3	O_Profe	32	Wireless sensor community	0.5	0.1	0.3
3	O_Profe	33	Musical	0.5	0.1	0.3

Table-2: Service Database

S_Name	S_ID	O_ID	St	PuP	Ir	Pi	Cu	As	Pd
Musical	11	1	Personal	0	0.5	0.99	0.9	0.6	0.77
Bike race	12	1	Personal	0	0.5	0.77	0.9	0.4	0.99
Cloud computing Community	13	1	Personal	1	0.5	0.65	0.9	0.45	0.88
Virtual forest	21	2	Game	1	0.99	0	0.77	0.2	0.55
Musical	22	2	Game	1	0.78	0	0.6	0.2	0.66
Bike race	23	2	Game	1	0.78	0.80	0.9	0.3	0.89
Cloud computing	31	3	Edu.	0	0.78	0.30	0.2	0.4	0.77
Community									
Wireless sensor	32	3	Edu.	0	0.89	0.4	0.5	0.5	0.83
Community									
Musical	33	3	Edu.	1	0.67	0.5	1	0.5	0.77

Table-3: Case Study

Users	Service Name	PuP	Re	Se	Pa	Ir	Pi	Cu	Selected Organizatio	Satisfaction
U1	Musical	1	0.85	0.325	0.9	0.75	0.55	0.625	O_Gamer	0.75
U2	Musical	0	0.45	0.65	0.75	0.56	0.9	0.95	O_Space	0.9
U3	Musical	0	0.55	0.77	0.77	0.80	0.2	0.78	O_Space	0.98
U4	Musical	Z	0.6	0.3	0.8	0.9	0	0.8	O_Profe	0.65
U5	Bike Race	0	0.77	0.4	0.5	0.8	0.2	0.3	O_Space	0.75
U6	Bike Race	0	0.9	0.3	0.4	0.75	0.2	0.4	O_Space	0.8
U7	Bike Race	0	0.8	0.3	0.4	0.6	0.9	0.8	O_Gamer	0.45
U8	Cloud Community	1	0.9	0.2	0.6	0.7	0.2	0.2	O_Space	1
U9	Cloud Community	1	0.2	1	0.5	1	0	0	O_space	1
U10	Cloud Community	0	0.5	1	0.5	0.75	0	0	O_Gamer	0.25

Three social networking organizations were created in a closed group with 50 users and they were designed to offer different services with different criteria. These social networking organizations were registered with the SNSA. Users were permitted to register with SNSA and provide their preferences in selecting their desired social networking services. The proposed framework was used in selecting the best service for each user based on their preferences. A study was conducted to obtain the user satisfaction from the registered user.

CONCLUSION

An effective framework for choice of social network services was planned. several criteria like info richness, reliability, search ability, paid/unpaid services, customizability, platform independence and activity support that influence the service choice were considered. The experimental analysis was performed on the planned framework and was found to be effective.

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PREDICTIVE ANALYSIS AS A TOOL IN DIGITAL MARKETING AND SALE WITH SPECIAL REFERENCE TO CASE STUDY OF SUPPLYCHAINCO

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ABSTRACT

The predictive analysis deals with creation of models and equations which help the company to predict the future. This output is based on raw data of the past. It is very efficient tool which many companies are employing to get the best out of their production. Its specific use in digital marketing has become a great for the companies to get into as it helps the company to predict their customers future behavior and it help the customers to satisfy their needs effectively. With this research paper, we intend to discover the various ways in which predictive analysis could be used by a company for digital marketing and sales and we have given a special reference of a case study which will help us to understand this tool in a better way.

Keywords: Predictive analysis, technique, Predictive analysis in Digital Marketing and sales.

INTRODUCTION

Predictive analysis is not a new concept and has been used for a long time. But the excitement on discovering and using predictive analysis and in particular with digital marketing is new because of the fact that never before has been time when the source of data has been this huge. There are lots of functions to play with and the processing power of company is increasing day by day.

In predictive analysis we analyze the data first and then predict the trends in future. Combining this with Digital Marketing, the future becomes a huge possibility where anything can happen. In general, predictive analysis deals with identifying what the future holds by analyzing the historical data. It is in human nature to want to know and predict about what future holds. Predictive analytics includes the prediction of future events based on past observed data by applying different techniques/ methods like machine learning. The process of prediction can be divided into four easy steps [1]:

- a) Collect the raw data
- b) Convert the raw data into a form which can be easily understandable and handle by machine learning method
- c) Create the training model using converted data
- d) Analyze and report about the prediction to the user who is using the previous created form

When we combine with digital marketing, it deals with what the digital marketing trends in future can be based on the past trends of customers choices. Predictive digital marketing process of data driven that helps the marketers to identify market buyers earlier in buying cycle and it also helps in coordination throughout the entire life cycle of customer and also increase the conversion rates and generates revenue. Predictive digital marketing process also involves the customer data collected automatically by using figures to build and modify the models and for each individual prospect responding with personal messages. So it is the vast amount of data and science to predict which digital marketing actions have high probability and which have low probability to get successful result.

OBJECTIVE OF RESEARCH PAPER

- i. To understand about predictive analysis, process of conducting predictive analysis and building a predictive analytical model
- ii. To discover predictive analysis as a tool for digital marketing and sales
- iii. To better understand the industry trends and how they are using predictive analysis as a tool to develop their business by taking two case studies from the market

RESEARCH METHODOLOGY

- In this we used empirical research.
- This research is based on secondary data collection
- The source of data is from previous published research papers, articles, and news.
- Sample size - 100

INTRODUCTION TO PREDICTIVE ANALYSIS

Predictive analysis involves use of cutting edge technologies present today and applying concept of organizational learning to predict the future with use of past trends and data. The availability of the data has always been there but it was not possible earlier for humans to manually compare those data, build models on them and learn from each change. With the help of growing technology this has become an easy task as we get the result in minutes.

The data available is huge but it's not always that all the data present is useful for an organization. The key is to pick useful data combine them together and make sense out of it. This is where predictive analysis comes to play. The predictive analysis in layman term pick the huge chunk of data present, eliminate the inefficient data which will not be in use, and combine the remaining useful data together to make a sense full data. This helps any organization to predict what the customer's next move will be. In fact predictive analysis is so deeply rooted in the industry that many organization practice it on daily basis to keep themselves up-to-date and to have an edge over their competitors.

This all is done by the help of data model which is solely based on data mining. Data mining is based on data base management, pattern recognition and artificial intelligence. This mining uses techniques such as algorithms, decision tree and network of data.

With the help of predictive analysis, we try to predict future probabilities and trends. It tries to automatically analyze the data fed into it with various techniques such as regression, decision trees, algorithmic, hypothesis formation and testing etc. the tool regression which is widely used for predictive digital marketing was developed by Sir Frances Galton which tends to develop relationship between one or more independent variable with dependent variable.

All of these techniques only provide us with inputs for decision. This input has to be combined with strategic and business knowledge to provide an insight to decision maker. This insight is crucial for decision maker to understand how people behave, act and react.

It is essential for predictive analysis to function well, it is essential that data provided to the tool is correct. The source of data should be of quality in order to build a model which stands trustworthy with time. The source of data can be either directly from the company data or from digital marketing platforms or it can be indirect from across the world with the help of web.

In order to develop predictive model one requires special skills for detail. The common step involved in developing model is:

Defining the project: the first step is to define the objectives of the project and what one is likely to achieve out of it. It also defines what one has to do to achieve those objectives in terms of tasks

Exploring: to analyze the data, one requires correct model. This step is related to exploring the options to select most appropriate approach to develop model

Preparing data: this step requires extracting raw data and transforming it into something which then becomes valuable to the organization

Building model: after creating data, we analyze options where we create and validate various models to test the best fitted model for the data which we have created

Deployment of model: after building successful model, we start using it for business perspective and then use the information to take decisions

A detailed modeling process requires following steps:

Step 1: Define purpose and objective of using the model

Step 2: Obtain the data from various sources depending on the costing and usability in future

Step 3: Classify the data in terms which is easily understandable. These terms can be in short form which can later be fully explained. This helps us to easily manage the data.

Step 4: in this step, we simplify the data by clubbing them together into groups with each group containing similar data

Step 5: we divide the data for training purposes and to check how well the previous designed model works on the data. This step is essential as it tells us if any modification is required on the model so that we can get best out of the data.

Step 6: use the algorithm to perform the task of analysis. This algorithm uses the existing data to predict the future data and trends.

Step 6: the final step is to interpret the result in the way which makes proper sense and it also helps the business to grow.

With the help of predictive analytic company in actual learn from their mistakes and thus grow. This happens because the artificial intelligence involved takes in account both good and bad examples and situations so that the next decision they make is best situation possible.

The need for predictive analysis is felt because of the fact that it helps us to achieve strategic objective of an organization which can either be to sustain, to grow, to compete or to improve.

USE OF PREDICATIVE ANALYSIS IN DIGITAL MARKETING AND SALES

The sale and digital marketing force currently face the challenge of attaining new customer and keeping the old one. Apart from this, they are also forced to keep their customer loyal and save them from competitions. For this, many companies are now turning towards predictive analysis. This tool is now providing the companies with winning edge where they know in advance what the customers desire and fulfill their demand on time.

Predictive analysis is best way for the companies to make sense of the huge chunk of data which keeps on coming their way. This data is available because of the digital marketing multichannel where they come in touch with customer at various points and at each point they get some information about the customer. This huge information does not make sense and are often ignored if it is not processed by a tool.

Social media has created a huge option for companies to get in touch with customer as it is a big platform for wither interacting with vendor or with clients. The clients and vendors express their ideas, suggestions and problems without any filter all the time on the social platforms. Apart from social media, mobile digital marketing has also become a big touch point for companies in order to connect with customer and collect data related to them. With the help of mobile digital marketing the company is now able to deliver personalized messages to the clients instantly.

As more and more mediums are emerging, the sources of collecting information from customer is also increasing. This is good for the organization if we ignore one basic issue of unstructured data. Unstructured data are those data which does not make sense if not analyzed properly.

This is where predictive analysis comes in place. With employing right tool at right time, the company will be able to collect all the data from all multichannel sources irrespective of its structure and get to information which is required i.e. who the customers are, what they desire, when they desire and what is that one factor which will make them buy your product. With the help of predictive analysis, the company will be able to segment their customers into predictable group and target them in personalized way which has never been done before. This will help the company to make correct choices about medium of communication and promotion to attract and retain the customers.

The areas where predictive digital marketing is turning out to be of great help in digital marketing are

1. Acquiring the customers

Obtaining the customer has always been a costlier affair than retaining the customers. But it is essential process in order to expand their customer base with time. With the help of predictive analysis the organization gets two fold benefit- one is increase in the number of customer obtained and second is reduction in the cost associated as it reduces the number of wasteful attempts which one makes to increase their customer base.

2. Customer retention

Customer attrition is one of the biggest problem of the organization. This leaves company helpless and in loss of billions of the dollars. Yet the company fails to understand the importance of retaining the customers. With the help of predictive analysis company can employ those selective tools which will help to increase and retain the customers which would have otherwise left the company in times of recession.

3. Up-selling

Up selling is a tool which helps the customer to increase their profit by selling high end product to the customer who would have otherwise not brought it or to sell more products to the customer. By this way the company can increase their customer base and also their profit. Effective upselling requires a deep insight into customer and creating a combination of good which is based on need and wants of the customer. This is possible by long and deep study of the customer buying habit and then predicting their future need by predictive analysis.

4. Price optimization

With the help predictive analysis, sales and Digital Marketing team tend to take proactive approach, to maximize price where they tend to reduce the cost in order to increase the volume of sales. They also become more enable to respond to market changes by adapting quickly and knowing what future holds.

Predictive analysis is still in early cycle with many of the marketers entering into it and experimenting to get the results. But with ease of use, and delivering the result at faster rate the company is able to capture the needs and hence understanding the importance of this tool in digital marketing.

CASE STUDY: PREDICTIVE ANALYSIS AS A TOOL IN SUPPLYCHAINCO

SupplychainCO was a middle company which used to buy inventory at a price and added their markup cost and sold to retailer and sold to retailer at price B. A special operation department in SupplychainCo was responsible for finding out new innovative methods to solve the problem which other team were facing in the company and how to help company to generate more revenue. One of the goals of this department was to predict price changes. If the company could in advance predict future price changes then they can buy inventory in advance at old cost and sell them later to retailer at new price thus making more profit. This method was called "Inventory hold gain".

For this the company decided to involve predictive analysis where they used both internal and external data. Internal data consisted of the quantity of the product, the price at which it was sold and the external data consisted of the weather changes, regulatory changes, problem faced in agriculture and so on. The decision to involve full-fledged predictive was based on the fact that for some products company had been using predictive analysis techniques manually and had good result which gave them confidence.

For this the department hired two IS (Information software) analyst and first task assigned to them was to consider how much the company could make if they used predictive analysis technique. The analyst worked with the merchandising managers to build upper and lower limit of profitability. The data built was too much for excel and existing software making the data usability limited. This was solved when the analyst came up with *Perfect Knowledge Model* which helped them to identify maximum limit of the inventory to be held before price change and maximum profit they could derive from this and kept in consideration the holding cost, perishability of material etc.

After this the analyst worked to discover the vendor which was best suited for their company and could help them to build this tool and with the help of predictive analysis they found such seven vendors who could help them to achieve their goals. Out of these seven companies, five were interested to work with the SupplychainCo and they were then interviewed. The problem they faced here was that most of the vendors wanted the company to work on predesigned tool and were not keen to develop specific tool for them. They then shortened the list to three vendors based on their experience, geographical closeness to the company and a vendor which even though was small fish, was enthusiastic to work with the company, and asked them to provide proof of concept. The goal was to test them and see if they can predict the increase in price. The vendors were provided with past five year data and were asked to predict the change based on the external data. The company already knew the answer but the goal was to check the working of the model designed by vendors.

The results were not up to the expectation of the company as out of three vendors not one was able to deliver up to the expectation of the company. One of the vendor told the management that they had clash with the NDA of different model which they were expecting to use, the other vendor told the management that the data was too big for them to work on and suggested to focus on KSU. One of the vendor was able to find little relation with the commodities and price change but their work was of little to no value to the company.

The company decided to create a table to see the problem from external point of view as seen in the table

	Vendor A	Vendor B	Vendor C
Local Office	No	Yes	Yes
Access to external data needed	Yes	Yes	Yes
Supply Chain experience	No	Yes	No
Ability to analyze qualitative and unstructured data	Yes	Yes but with additional cost	Yes
Vendor analytics available	Yes	Yes	Yes
Working with existing architecture	Yes	Yes	Yes
Ability to create custom solution	Had the required ability	Had the ability but preference was to use out of the box solution	Did not had the required ability, performed from out of the box solution and did not deliver

Table-1: Pros and cons of Vendors

From this the company could decide that vendor B and C were out of the race and since vendor A was well suited, it could help the company to make a better model.

CONCLUSION

Predictive analysis is a tool which has helped a lot of companies to gain benefit either by reducing cost or increasing customer base or by simply making more profit. It is yet in developing phase because earlier the companies were skeptical about getting into it because of the cost involved. But lately more and more companies have realized that return on investment is more than the cost involved which has prompted many companies to try this analysis and incorporate the tool into their working.

Predictive analysis has helped many companies to achieve digital marketing goals and has helped them to understand who their customers are, what they want and when do they want it. This has helped the company to capture the market, increase their customer base and do up selling. The predictive analysis has become special tool for companies to deal with their vendors and have more profit in return.

The scope of this form of analysis is unlimited and companies have just started to discover the use of various methods. It will be interesting to see what all the companies can achieve by employing artificial intelligence and data gathering into the system and developing more and more advanced tools to achieve their goals.

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VALIDATING JOB CRAFTING SCALE IN INDIAN CONTEXT

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ABSTRACT

Job crafting is an emerging and novel concept in the organisational health psychology with a potential to predict employee's well-being. The researches on job crafting however have primarily being qualitative in nature (Berg et al., 2010; Wrzesniewski & Dutton, 2001) and lack quantitative measures. Recently a job crafting scale was developed and validated by Tims et al. (2012) which has its roots developed from the Job Demand –Resource model and differentiates between challenging and hindering job demands (Rodell & Judge, 2009). The scale consist of four dimension with 21 items aimed at increasing Structural job resources, social job resources, challenging job demand and decreasing hindering job demands.

The study aimed at validating the existing job crafting scale given by Tims & Bakker (2012), to explore its validity in different occupation and national context.

Keywords: Job crafting, Instrument Validation, Job Demand Resource model

INTRODUCTION

The modern organisations demand their employees to be more proactive and react to unusual situations (Erdogan & Bauer, 2005). It is believed that proactive employees redefine their jobs to increase the scope of the job by adding new goals and task to get a better person – job fit (Berg, Wrzesniewski, & Dutton, 2010). Job crafting is one such proactive approach where employees make physical and cognitive changes in the task and relational boundaries of their job (Wrzesniewski & Dutton, 2001). After Wrzesniewski(2001) coined the term, a number of qualitative and quantitative researches have been initiated to study the ways employees craft their job related consequences. A substantial body of quantitative researches on the topic are based on the Job demand- Resource (JD-R) model (Tims & Bakker, 2010; Tims, Bakker, & Derks, 2012). The JD-R model, specifically suggests that a situation of high job demands and low job resources lead to person-job misfit. To adjust these misfit employees, initiate job crafting behaviour by altering the job demands and resources. Tims et al. (2012), recently developed and validated measure of job crafting based on four dimensions- increasing structural job resources, increasing social job resources, increasing challenging job demands and decreasing hindering job demands. They further distinguished between challenging job demands (eg. Task complexity) and hindering job demands (role conflicts, working with wrong material) and proposed that increasing challenging job demands and decreasing hindering job demands lead to favourable organisational outcomes like well-being at work.

The present study is an attempt to validate the Tims and Bakker (2010) job crafting scale and test its reliability in Different cultural setup because only few studies on the topic have been conducted in Asia (Chen, Yen, & Tsai, 2014; Sekiguchi, Li, & Hosomi, 2014). Most of the quantitative researches on job crafting have been reported from The Netherlands (Petrou et al., 2012; Tims et al., 2012, 2014; Tims, Bakker, Derks, et al., 2013; Tims, Bakker, Derks, & Van Rhenen, 2013; Nielsen, 2017)

EXISTING JOB CRAFTING MEASURES

Ghitulescu (2006): The scale is based on the job crafting model given by Wrzesniewski and Dutton (2001) consisting of three dimensions of job crafting Task crafting, Cognitive job crafting and Relational job crafting. The study was administered on a sample of 70 employees in 21 stable teams from a manufacturing organisation in the auto industry utilizing craft-like work and autonomous teams of assembly workers. The scale however is not validated in other countries. The validation of the scale was limited to some specific profession only.

Leana et al. (2009): based on Wrzesniewski and Dutton (2001) framework of job crafting, Leana et al. (2009) developed and tested the measure based on task, cognitive, relational job crafting on 232 teachers in US. The scale is validated in Taiwan by Chen et al., (2014) and four of its items are used by Slep and VellaBrodrick (2013).

Nielsen and Abildgaard (2012): extending Tims and Bakker's model of job crafting, Nielsen and Abildgaard (2012) added an extra dimension to job crafting scale called increasing quantitative job demands. The scale was validated on a sample of 362 Postal service workers in a longitudinal study in Denmark. This measure of job crafting was also validated in Taiwan, China, Spain and UK.

Petrou et al. (2012): Based on Tims and Bakker (2010) framework, Petrou et al. (2012) measure of job crafting consisted of three dimensions- seeking resources, seeking challenges and reducing demands. They conducted 5-days' diary studies on 95 employees of The Netherlands. The scale however is not used in other countries.

Sekiguchi et al. (2014) : based on Wrzesniewski and Dutton (2001) conceptualisation of job crafting Sekiguchi et al. (2014) measure of job crafting consisted of three dimensions- Task crafting Relational crafting Cognitive crafting. The measure was tested on 509 students with part-time job and 594 employees in Japan. It is further validated in China (Li, Sekiguchi, & Qi, 2014).

Tims et al. (2012): based on Tims and Bakker (2010) framework this measure consist of four dimensions of job crafting- Increasing structural job resources Increasing social job resources Increasing challenging job demands. This job crafting scale is validated in countries like The Netherlands, Iran, Turkey, Spain, Egypt and in India also Siddiqi, (2015), validated the scale on banking sector employees.

Hypothesis: the four factor model of job crafting consisting of increasing structural job resources, increasing social job resources, increasing challenging job demands and decreasing hindering job demands will fit the data best in comparison to the one factor model.

THE RATIONALE FOR USING TIMS ET AL. (2012) JOB CRAFTING SCALE

Despite the presence of many instruments for measuring the job crafting behaviour of employees, the author opted for Job Crafting Scale based on JD-R model developed by Tims et al. (2012). The authors developed and validated the scale in three separate studies conducted in The Netherlands with a sample size of 1181. The study 1 and 2 reported the factor structure, reliability and convergent validity of the instrument. Study three reported the convergent validity with active constructs proactive personality (+), personal initiative (+), and the inactive construct cynicism (-). The JC scale has undergone a rigorous process as initially it had 42 items contained in three dimensions of increasing structural job resources, increasing challenging job demands and decreasing hindering job demands which were later reduced to 21 items contained in four dimensions of Job crafting – Increasing structural job resources, increasing social job resources, increasing challenging job demands and decreasing hindering job demands. The previous scale developed and validated by by Ghitulescu (2006) and Leana et al. (2009) focused on specific profession (manufacturing and teaching) only however Tims et. al (2012) scale included employees from different sectors like health sector, educational sector, service sector which indicates that the scale may be applicable in different occupations. The measure also address the need for generalizability of findings to all group of workers with sufficient number of males (429) and females worker (752). One of the limitations of the instrument was that all participants in the survey were from Dutch, therefore the scale needs generalizability to other nationalities.

RESEARCH METHODOLOGY

Participants and Procedure: data was collected through cross sectional research design. Using purposive sampling, Multinational IT companies where work engagement practices are in place have been adopted because studies reported that MNC's are more likely to have active employee wellbeing as compared to small companies. Data have been collected from employees working in Delhi and NCR regions. Initially, HR department of five companies were contacted to conduct the survey and anonymity and confidentiality of employee's name were assured to them. Since only three companies agreed after persuasive session, the researcher used snowball sampling to get more respondents. The administration of questionnaire started with distribution of 200 questionnaires from the agreed three MNC from Noida and afterwards an online version of the questionnaire was created and delivered to the references given by employees of these companies in snowball sampling. Though 400 questionnaires were circulated, only 319 completely filled responses were received yielding a response rate of 79.7%. Nine questionnaires were rejected during initial screening due to multiple responses, making the sample size 310 for further analysis. Out of 310 respondents, 224 (72.3%) were male and 86 were females (27.7%); 53.9% employees were working in the company for one to five years. The average age of respondents was 28.2 years. The sample consisted of 64.5 % (200) graduates, 92 post graduates (29.7%) with majority of respondents performing technical (64.5%) and managerial level (18.7%) tasks.

MEASURES

Job crafting: job crafting was measured with the originally developed job crafting scale (Tims et al. , 2012). JCS is a 21 item scale consisting of four underlying job crafting behaviour. The first job crafting behaviour is increasing structural job crafting (five items, typical items include "I try to develop my capabilities"). Reliability of this measure (Cronbach α) is .0.91. The second job crafting behaviour is increasing social job resources (five items, typical item include "I ask my supervisor to coach me) with cronbach α 0.88. Third job crafting behaviour is increasing challenging job demands (five items; e.g. "When there is not much to do at

work, I see it as a chance to start new projects”) with cronbach $\alpha=0.89$ and the fourth job crafting behaviour is , decreasing hindering job demands (six items; e.g. “I make sure that my work is mentally less intense”) with cronbach $\alpha = .862$. All the responses were coded in five point likert scale ranging from 1(strongly disagree) to 5 (Strongly agree).

Work engagement: work engagement is measured using nine item Utrecht Work Engagement Scale by Schaufeli et. 2002). All items were scored on a five point likert scale ranging from 1 (strongly disagree) to 5 (Strongly agree). The scale includes three dimensions Vigor (3 items), dedication (3items) and absorption (3 items). The overall reliability of the scale was 0.91.

Control variables: all the respondents were asked to provide some personal information like age, gender, marital status, educational qualification. Confounding relationship was avoided by controlling these demographic variables (Liu et al., 2016).

DATA ANALYSES

Since there is lack of studies reporting validation of job crafting scale in India, the author started the validation process from EFA.

Exploratory Factor Analysis: EFA was performed with principal component analysis with help of software SPSS 21 to experiment factor structure of score. The exploratory factor analysis incorporated all the 21 items and basis for retention of items of Job crafting construct was Eigen value >1.0 . The result showed the extraction of four factors with Eigen value greater than 1.0. The sample adequacy was predicted by Kaiser–Meyer–Olkin measure (0.93). Bartlett’s test of sphericity ($\chi^2(153) = 3596.85, p < 0.001$) We found cross loading on three factors. First was “When an interesting project comes along, I offer myself proactively as project co-worker” loading high on challenging job demand (0.535) but also reported high loading on Structural job resources (greater than 0.4) . Second was “I decide on my own how I do things loaded high on structural job resources (0.53) and low on challenging job demands (greater than 0.4). Third factor was “If there are new developments, I am one of the first to learn about them and try them out” loading high on increasing challenging job demands (0.541) and low on increasing structural job resources. Since the cross loading was greater than 0.4 on undesired items, all three items were deleted by following the recommendations of Gorsuch (1983) and we run EFA again. This time a clear factor structure was notices as depicted in table 1.

Table-1: EFA result: Rotated Component Matrix^a

	Component			
	1	2	3	4
<i>Structural Job Resources</i>				
1. I try to develop my capabilities			.819	
2. I try to develop myself professionally			.820	
3. I try to learn new things at work			.821	
4. I make sure that I use my capacities to the fullest			.774	
<i>Decreasing Hindering Job demands</i>				
5. I make sure that my work is mentally less intense		.642		
6. I try to ensure that my work is emotionally less intense		.638		
7. I manage my work so that I try to minimize contact with people whose problems affect me emotionally		.708		
8. I organize my work so as to minimize contact with people whose expectations are unrealistic		.744		
9. I try to ensure that I do not have to make many difficult decisions at work		.690		
10. I organize my work in such a way to make sure that I do not have to concentrate for too long a period at on		.750		
<i>Increasing Social job resources</i>				
11. I ask my supervisor to coach me	.728			
12. I ask whether my supervisor is satisfied with my work	.795			
13. I look to my supervisor for inspiration	.722			
14. I ask others for feedback on my job performance	.730			
15. I ask colleagues for advice	.767			

<i>Increasing Challenging job demands</i>				
16. When there is not much to do at work, I see it as a chance to start new projects				.631
17. I regularly take on extra tasks even though I do not receive extra salary for them				.824
18. I try to make my work more challenging by examining the underlying relationships between aspects of my job				.745
Extraction Method: Principal Component Analysis. Factor loading > 0.40				

All the four factors together explained 70.98% (earlier 62.31%) of variance. The first factor (Eigen value= 8.62) explained 47.86% of the variance is formed by items for increasing social job resources (five items). The second factor with Eigen value 1.76 explained 9.79% of variance and is labelled with decreasing hindering job demands (6 items). The third factor (Eigen value= 1.37) explained 7.61% of variance and is the dimension increasing structural job resources (4 items). The fourth factor named as increasing challenging job demands (3 items) (eigenvalue= 1.03) explained additional 5.72 % of variance. Therefore the resultant scale is an 18 item scale.

Reliability

Each dimension of job crafting has a good reliability. Overall reliability of the job crafting scale was found to be 0.93 (Cronbach's alpha) which was quite above the acceptable limit of 0.7 (Nunnally, 1978). Reliability of increasing structural job resources (4 items) , decreasing hindering job demands (6 items), increasing social job resources (5 items) and increasing challenging job demands (3 items) came out to be 0.92, 0.86, 0.89 and 0.84 respectively.

Construct validity

For checking the construct validity, convergent and discriminant validity of all the four dimensions were calculated. The results are displayed in table 3. CR> 0.7, AVE>0.5 and CR>AVE shows the scale has the convergent validity. The discriminant validity is also proved as AVE>MSV and AVE>ASV in all the four dimensions of job crafting.

Table-2: Construct validity

Convergent and discriminant validity				
	CR	AVE	MSV	ASV
CJD	0.845	0.645	0.539	0.436
SJR	0.92	0.743	0.539	0.414
SoJR	0.89	0.618	0.487	0.431
HJD	0.863	0.512	0.487	0.436

CONFIRMATORY FACTOR ANALYSIS

The study examines whether the four factor structures can be replicated in Indian sample. The author hypothesised that the four factor model will fit the data best in comparison to one factor model..To asses model fit, five indices were used: chi-square/df ratio (χ^2/df), as well as the Tucker–Lewis Index (TLI), the Comparative Fit Index (CFI; Bentler, 1990), the Incremental Fit Index (IFI) and the Root Mean Square Error of Approximation (RMSEA; Browne & Cudek, 1993). The acceptable limit of the indices for a good model fit are chi-square/df< 3 ((Kline, 1998), TLI, CFI, and IFI should be less than 0.90 and RMSEA should be less than 0.08 (Byrne, 2001). The researcher also checked the four factor model fit with one factor model fit by testing the change in χ^2 across models. The result of the CFA is presented in Table 1. The fit for four factor model was significantly better than the one factor model ($\Delta\chi^2=720.11$, $\Delta df= 6$, $p<.001$). Hence the hypothesis 1 was supported. The goodness of fit indices for four factor model were (approximately) 0.90 and RMSEA was 0.08 which support acceptability of the model fit (Bollen, 1989). Moreover the one factor model did not fit to the data ($\chi^2/df>3$).

Table-3: CFA results

Model	χ^2	df	χ^2/df	CFI	TLI	IFI	RMSEA
One factor model	1366.49	189	7.23	0.729	0.699	0.73	0.142
four factor model	346.25	129	2.68	0.94	0.93	0.94	0.07

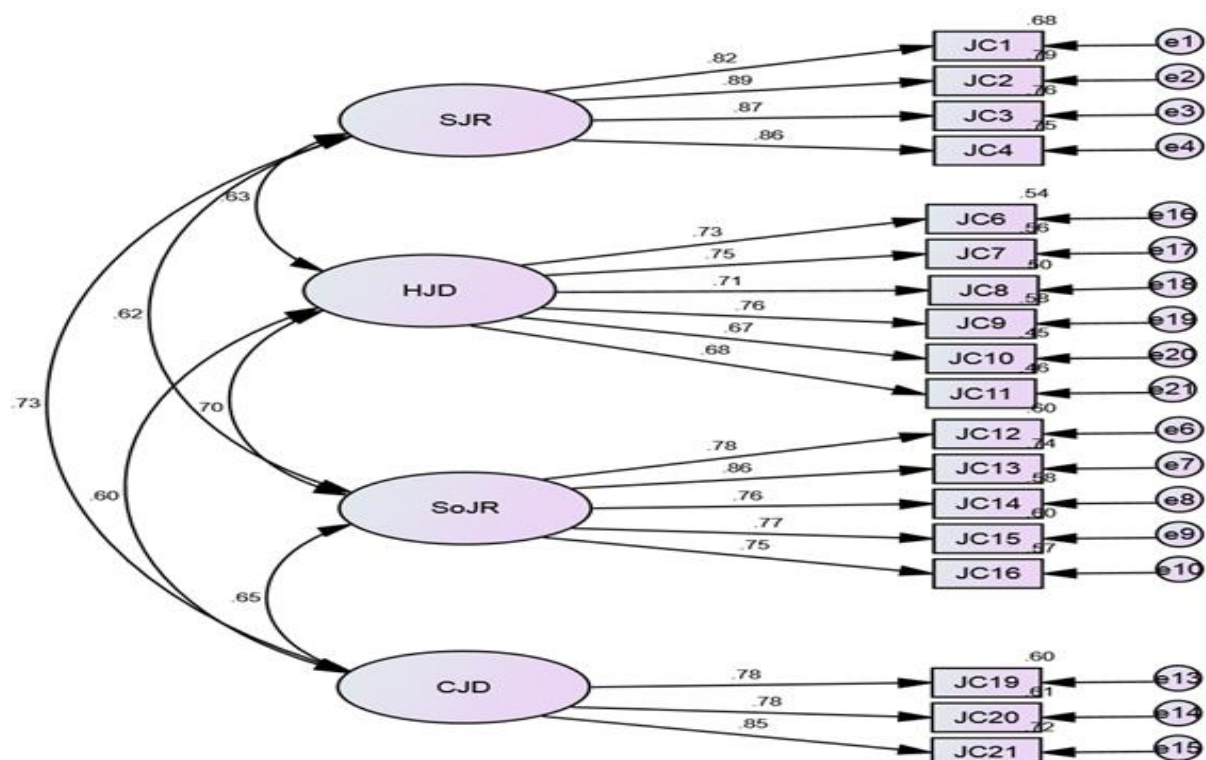
DISCUSSION AND IMPLICATION FOR MANAGERS

The present study validated the recently developed Job crafting scale in India which is one the fastest growing economy of the world. Previous researches reported the importance of employee's proactive behaviour for predicting their well-being but only few measures are available to measure this construct (Tims and Bakker 2010), especially in India where researches on job crafting is at its infancy. Stating the importance of job crafting in improving organisational and individual outcome, it becomes important to prepare an instrument measuring job crafting behaviour of employees in Indian settings. This study aimed at determining the applicability of Job crafting scale in Indian culture. To meet the stated objective, the author conducted EFA, CFA, and calculated convergent and discriminant validity of the instrument on Indian sample from IT industry. This validation will allow researchers to use this scale for measuring the job crafting behaviour of employees to a context which is quite different from the country where it was developed and validated first.

EFA has outlined four factors in Indian context which is similar to the originally developed scale validated in The Netherlands (Tims & Bakker, 2012). However three items were deleted in EFA due to high cross loading (0.40) on multiple factors and a resultant scale is an eighteen item scale with reliability (0.93) better than the original scale with 21 items (0.85) and no cross loadings. Additionally CFA results also ensured high model fit for four factor models in comparison to one factor model. The results confirmed the findings of Tims et al (2012) where they tested three different models for job crafting and supported the second order model with four factors. One of the reasons for the non-replication of all the items of the scale may be that the difference in occupations shows some particular configuration of job demands and job resources leading to a variation in their job crafting behaviour (Bakker & Demerouti, 2008). The results of the study are not in support of Chinellato et al (2015) where the authors validated the instrument for Brazilian population and lead to the deletion of Hindering job demand dimension, the reason being their sample of population consisted of 80.4 % respondents who had not even completed higher level education as against the sample chosen in the original studies where 70% respondents were graduated and from a different occupation. This may change their perception of job demands and job resources.

Figure-1: Four-factor Correlated Model of Job crafting

These results partially confirmed the findings of Tims et al. (2012). They also tested three different models and chosen the second order model with four primary factors. These results partially confirmed the findings of Tims et al. (2012). They also tested three different models and chosen the second order model with four primary factors. These results partially confirmed the findings of Tims et al. (2012). They also tested three different models and chosen the second order model with four primary factors. These results partially confirmed the findings of Tims et al. (2012). They also tested three different models and chosen the second order model with four primary factors.



CONCLUSION

This study has validated the job crafting scale in Indian population which will stimulate and encourage researches in the area of proactive behaviour of employees in shaping their jobs. Considering the chi-square values, the four factor model consisting of increasing structural job resources, increasing social job resources, increasing challenging job demands and decreasing hindering job demands best fitted that data in comparison with the one factor model. The results ensure that irrespective of being developed in a different culture, the instrument reported favourable psychometric features in India scenario. However for better generalizability and acceptance of the scale, more studies are required to be conducted in different occupations.

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BEHAVIOR AND DIGITIZATION: A STUDY OF PERCEPTION TOWARDS DIGITAL MONEY**Abha Gupta¹ and Dr. Anshu Tyagi²**Assistant Professor¹ and Associate Professor², Rukmini Devi Institute of Advanced Studies, Delhi**ABSTRACT**

The last decade has seen tremendous growth in use of internet and mobile phone in India. Increasing use of internet, mobile penetration and government initiative such as Digital India are acting as catalyst which leads to exponential growth in use of digital money. Electronics Consumer transaction made at point of sale (POS) for services and products either through internet banking or mobile banking using smart phone or card payment are called as digital Money. The study tries to find out different factors that influence decisions of the individual towards usage of digital facilities for money transactions and its impact on decision making. For this, sample of nearly 270 respondents were taken and their responses were analysed using SPSS and Amos. The study conducted confirmatory factor analysis and Structural Equation Modeling and finds significant relationship between various factors broadly characterized by benefits, accessibility, fees and charges, privacy and convenience and decision making towards use of digital money.

Keywords: Digital Payment, UPI, NPCI, E-Wallets, BHIM

INTRODUCTION

It has been said that every disruption creates opportunities and one such disruption was the announcement of demonetization by Prime Minister Mr. Narendra Modi on 08 November 2016. Digital payment in India was gotten huge growth due to Demonetization. It created opportunity for the Digitalization and the E-wallet companies grabbed the opportunities with both the hands to increase their market share.

Prime Minister Mr. Narendra Modi pushed adoption of cashless transaction. As a part of government reforms after high value currency of Rs. 500 and 1000 (86% of cash circulation). The demonetization resulted in huge growth in digital payment. Indian government and private sector companies pushed digital payment applications such as Paytm, Freecharge and Mobikwik including the Aadhaar Payment app, the UPI app, and the National Payments Corporation of India (NPCI) developed the Bharat Interface for Money (BHIM) app.

There are number of facilitators which are leading to the growth of digital payment and transition from cash economy to less cash economy. There are several mode of digital payment available in India such as **online or mobile wallets, prepaid credit cards, Debit/RuPay cards**; Unstructured Supplementary Service Data based mobile United Payments Interface (UPI).

LITERATURE REVIEW

Wendy Ming-Yen Teoh, Siong Choy Chong, Binshan Lin, Jiat Wei Chua (2014) have showed that three factors, i.e. benefits, self-efficacy, and ease of use are significantly associated with consumers' perception toward e-payment. **Peter Tobbin, John K.M. Kuwornu, (2011)** in their research showed that Perceived Trust, Trialability and Perceived Risk were significantly affecting Behavioural Intention. **Peter TOBBIN (2010)** found that perceived Ease of Use and perceived usefulness were the most significant determinants to intention to use mobile money transfer in Ghana and Perceived Trust, Trialability and Perceived Risk were also found to significantly affect Intention towards use of digital money. **Elizabeth Daniel** concluded that organization's vision of the future, their prediction of customer acceptance, and their organisational culture of innovation are the most important factors in their adoption of electronic delivery.

Prof. Dr. Hussain Ali Bekhet, Prof. Dr. Basheer Abbas Al-allak, Stated that an increase of clients' confidence in E-statement will have a significant influence on their behavior demonstrated through increased usage of it and word of mouth. **Tomasz Stanislaw Szopiński, (2016)** demonstrates that the factors which mostly determine the employment of online banking are: the use of the Internet, taking advantage of other banking products as well as trust in commercial banks. **Dr. Hamza Salim Khraim, Dr. Younes Ellyan AL Shoubaki, Dr. Aymen Salim Khraim (2011)** suggested that the six factors; self efficacy, trialability, compatibility, complexity, risk and relative advantage were statistically significant in influencing mobile banking adoption. **Ayana Gemechu Bultum, (2014)**, concluded that security risk, lack of trust, lack of legal and regulatory framework, Lack of ICT infrastructure are significantly affecting adoption of digital banking. **Sherif Kamel, Ahmed Hassan**, suggested that major efforts in building infrastructure build up, including technology and human development need to be taken place in order to boost the usage of internet banking.

RESEARCH METHODOLOGY

Objectives

1. To trace the theoretical frame work of the digital money.
2. To analyze the impact of demographic variables on various psychological perception factors.
3. To identify various psychological factors influencing consumer's perception towards digitalized money
5. To develop a model and validate it through using SEM for finding the impact of psychological factors on using digitalized money.

HYPOTHESIS

H1O: There is no significant relationship between psychological perception factors and usage of digitalized money.

H2O: Gender has no significant relation with the psychological factors influencing digitalization of money.

H3O: Age has no significant relation with the psychological factors influencing digitalization of money.

H4o: Occupation has no significant relationship with psychological factors influencing digitalization of money.

H5O: Experience has no significant relationship with psychological factors influencing digitalization of money.

RESEARCH METHOD

The Research design of the paper is descriptive. We target equity investors for the study. Sample of 270 equity investors has been taken for the research on the basis of Multistage Random and Convenient Sampling Technique. Structured questionnaire is used for data collection. Primary as well as secondary data is used for this study. Analysis is done through SPSS software and AMOS.

ANALYSIS AND DISCUSSION

CFA of Psychological factors

Table No-1: Regression Weights

			Estimate	S.E.	C.R.	P	Label
Ease	<---	Convenience	1.000				
Comfort	<---	Convenience	.841	.223	3.781	***	par_1
Approachability	<---	Accessibility	1.000				
Penetrability	<---	Accessibility	1.037	.116	8.905	***	par_2
Comprehensibility	<---	Accessibility	.968	.122	7.900	***	par_3
Consideration	<---	Fees and Charges	1.000				
Commission	<---	Fees and Charges	1.007	.162	6.220	***	par_4
Assured	<---	Security	1.000				
Soundness	<---	Security	1.070	.126	8.479	***	par_5
Reliability	<---	Security	.973	.126	7.722	***	par_6
Surety	<---	Security	.864	.149	5.795	***	par_7
Satisfaction	<---	Benefits	1.000				
Utility	<---	Benefits	1.596	.309	5.161	***	par_8
Value	<---	Benefits	1.636	.323	5.060	***	par_9
Assistance	<---	Benefits	1.558	.310	5.029	***	par_10
Payment	<---	Fees and Charges	.909	.161	5.643	***	par_11

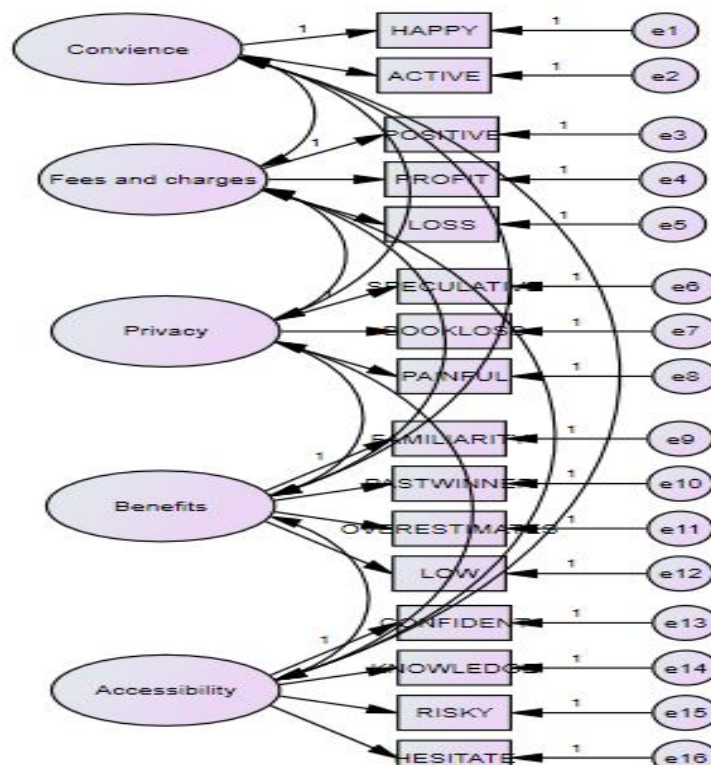
Source: Researcher's Output

Table No-2: Results of Goodness of Fit for Overall Model

Model	CMIN	P value	CFI	RMSEA
Study Model	1.590	.000	.902	.110

Source: Researcher's Output

Table No-2: shows the values of goodness of fit indices and all indices meet the recommended values.



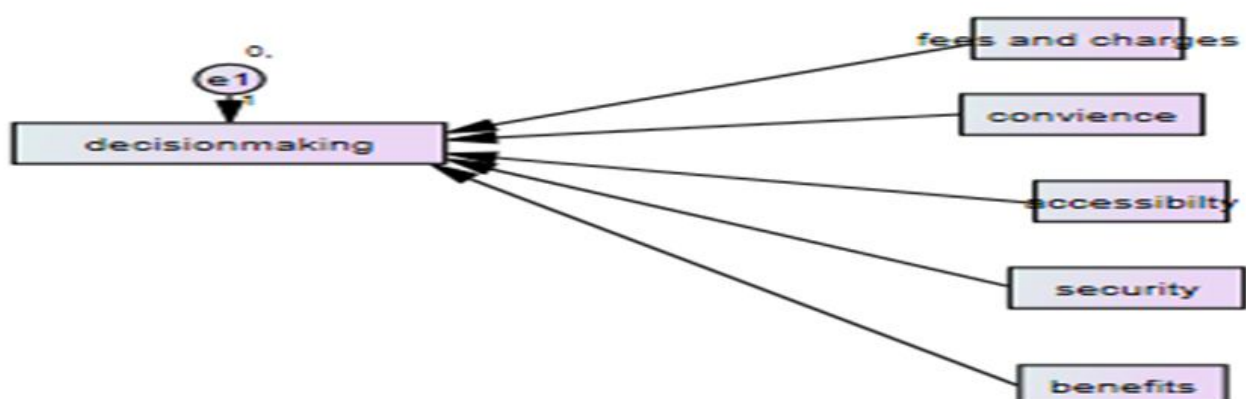
From the results, it can be inferred that there are five categories of parameters that

Influence the usage of digitalized money. Since, the results of CFA are coming out to be significant for psychological factors influencing usage of digitalized money decision; we can impute the values and can run regression on the imputed values of parameters namely convenience, fees and charges, privacy, benefits, accessibility.

Regression Results taking Decision making as dependent variable.					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.699 ^a	.489	.431	.83091	1.795
a. Predictors: (Constant), convenience, Fees and charges, Privacy, Benefits, Accessibility					
b. Dependent Variable: decision-making					

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	29.084	5	5.817	8.425	.000 ^b
	Residual	30.378	44	.690		
	Total	59.462	49			

SEM Analysis



CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	17	40.352	10	.000	4.035
Saturated model	27	.000	0		
Independence model	12	73.261	15	.000	4.884

Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	Label
decisionmaking	<--- Security	-.279	.091	-3.074	.002	
decisionmaking	<--- Fees and charges	-.091	.105	-.866	.386	
decisionmaking	<--- benefits	.737	.136	5.414	***	
decisionmaking	<--- convenience	.684	.109	6.302	***	
decisionmaking	<--- Accessibilty	.701	.153	4.585	***	

Squared Multiple Correlations: (Group number 1 - Default model)

Squared Multiple Correlations	Estimate
decisionmaking	.672

Results of SEM and regression is coming out to be significant, thus Hypothesis H1O is not accepted. Thereby stating that psychological factors are influencing decision making of the individual towards using digitalized money.

Impacting Variable	Gender	Age	Occupation	Income	Experience in Market
Dependent Variable					
Benefits	.776	1.054	1.085	.269	.086
Security	.003	.239	.506	1.298	.125
Accessibility	.086	.427	1.350	1.822	.605
Privacy	.010	2.222	1.576	.479	.530
Fees and Charges	.189	.347	.438	1.738	.464

From all the Anova tables, it can be inferred that none of the demographic variable is influencing psychological factors significantly as f-statistics is less than 4 and p-value is more than 0.05. Hence, H2O, H3O, H4O, H5O all are accepted.

FINDINGS

1. There exhibits 5 psychological factors which are influencing decision making of using digitalized money.
2. There is significant relationship between psychological factors and decision making of using digitalized money
3. Demographic variables are not influencing psychological factors in any manner.

CONCLUSION

Digitization is not merely a word. It is a hope and objectives for many. Half of the population of this country is not given opportunity to use this facility. This study has highlighted that there are five different psychological factors that affects the decision making of the individual while taking decisions relating to digital money. These factors are significantly affecting their decisions. At the same time, one can conclude that demographic variables are not influencing psychological factors in significant manner.

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INDUSTRY 4.0 – A DIGITAL INDUSTRIAL REVOLUTION IMPACTING DEMOGRAPHICS OF EMPLOYMENT

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ABSTRACT

This paper deals with analyzing the transformation in the industrial production processes that is occurring owing to fourth industrial revolution and the effects on demographics on employment. The rise of new digital industrial technology, known as Industry 4.0, is a renovation that makes it possible to assemble and analyze data across machines, enabling faster, more flexible, and highly efficient processes to manufacture supreme quality goods at lowest possible costs. Industry 4.0 defines the system of production processes depends on the autonomously communicating devices with each other and technology along the value chain: a model of future smart factory which makes decentralized decisions based on self-organization mechanisms, create a virtual copy of the physical world. In industry 4.0, computer-driven systems monitor physical processes. This manufacturing revolution will increase productivity, shift economics, foster industrial growth, modify the profile of the workforce and eventually changing the competitiveness of companies and regions. It will surely lead to greater efficiencies and change traditional production relationships among suppliers, producers, and customers as well as between human and machine. In this paper, I introduce and describe basic principles and components, benefits, government's role, issues and challenges in adopting and implementing the concept of Industry 4.0 in India. Many organizations in India are still denying to adopt the concept of Industry 4.0 as they are not sure about the impact of the same on their business or struggling to find the talent or knowledge which enables them to best adopt it for their unique uses, several others are gearing up to implement changes today and preparing for a future where smart machines improve their business. This research is an attempt to analyze that how the businesses are going to manage these interconnected diverse entities consisting of men and machines with the concept of Industry 4.0.

Keywords: digitization, artificial intelligence, smart factory, industrial performance, revolutionary growth.

INTRODUCTION

Change is the nature of law that brings disruption and diversities being witnessed since centuries. Each industrial revolution brings change-both positive and negative. Emergence of diversities is an outcome of industrial revolution. While the first industrial revolution was based on the use of steam and steam engines (end of 18th century), the second was electrification (beginning of 20th century), third on computers and robots (beginning of 1970) and today, the fourth is based on the use of Cyber Physical Systems (CPS).

The concept of Industry 4.0 was first presented in 2011 at the Hannover **MESSE** – world's leading trade *fair* for industrial technology in Germany. Professor Wolfgang Wahlster, Director and CEO of the German Research Center for Artificial Intelligence, suggested that the world must be in shape for the 4th Industrial Revolution that is being driven by the Internet. In 2012, a task force led by Siegfried Dais (Robert Bosch GmbH) and Henning Kagermann (German Academy of Science and Technology), further initiated this concept for achieving the vision of integrated industry known as Industry 4.0 or the 4th Industrial Revolution.

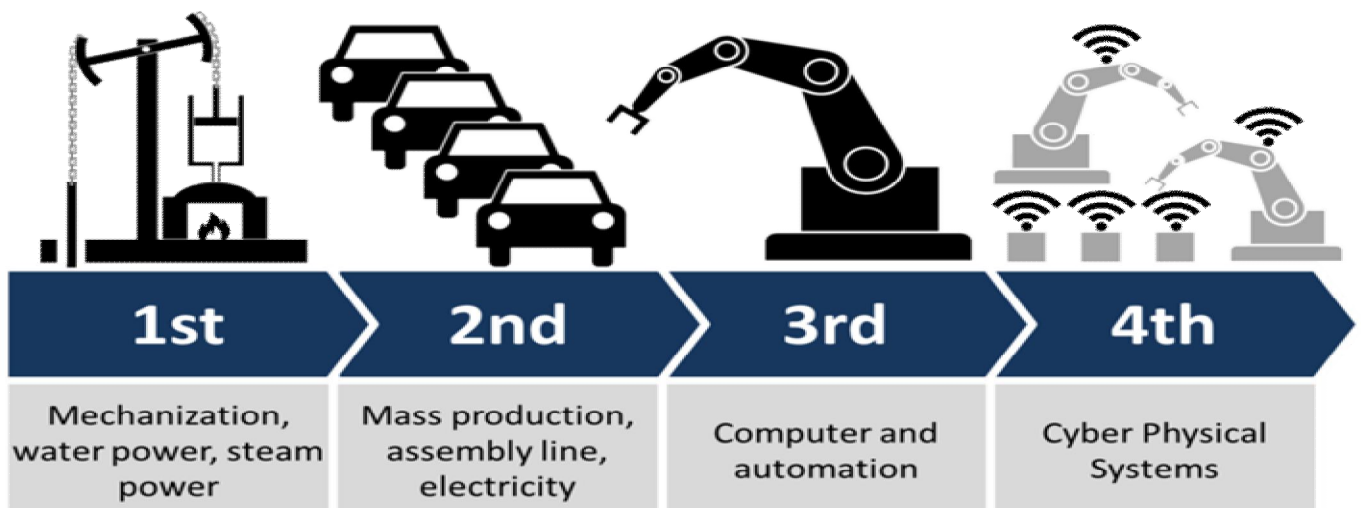


Fig-1: chronological progress of the industrial revolutions

This concept introduces the idea of interconnectivity of high-tech production machinery, machined products and semi-finished products and all other systems and subsystems of an industrial enterprise. These systems including machines and human operate independently and communicate with each other to create an intelligent distributed network of diverse entities throughout the value chain forming.

OBJECTIVES

1. To identify the components of Industry 4.0.
2. To analyze the benefits & challenges of adopting Industry 4.0.
3. To determine the impact of new industry model on demographics of employment.
4. In estimate the type of jobs that Industry 4.0 will introduce or need more labor in

COMPONENTS OF INDUSTRY 4.0

The basic components of Industry 4.0 are as follow

- **Cyber Physical Systems**

The Combination of physical and virtual world is an important component of Industry 4.0. Cyber-Physical System (CPS) has made it possible to establish this connection. Cyber-Physical System integrates the computational and physical processes, embedded computer and management processes retrospectively when serious physical processes complement of computer and vice versa. CPS has been developed so far in three phases. The first generation was of the identification of technologies such as RFID tags, which are used for unique identification and tracking. The second generation of the CPS involves sensors equipped with a limited range of functions where as third generation are able to store and analyze data as they are equipped with sensors and are connected to the network.

- **Internet of Things (IoT)**

The fourth industrial revolution or industry 4.0 has integrated Internet of Things (IoT) and Internet of service (IoS) in the manufacturing process. Internet of Things allows "things" and "objects" as RFID, sensors, mobile phones integrate into unique links, which can work together with other objects to achieve a common solution. The Internet of Things can be defined as a network in which CPS collaborate through unique links. The integration of technologies allows a number of objects to work together and solve problems independently. The smart factories, homes or networks are some examples of the uses of the Internet of things.

- **Internet of Service (IoS)**

Internet of service signifies provision of services using Internet. IoS consists of participants, infrastructure services, business models and services themselves. Services are offered and merged into value-added services from different vendors, and communications via various communication channels. **Internet of Services (IoS)** focuses on and delivers the required business value from the Internet of Things (IoT). This approach allows different variants of distribution in the value chain.

- **Smart Factory**

Smart factory is also referred to as key advantage of Industry 4.0. Smart factories are defined as factories and machinery to assist people to fulfill their tasks. This objective is fed on the basis of information obtained online, so is every moment possible to ascertain the status of the device, the position and the like. The physical and virtual world provide basic formation to these system to perform different task. Information from the physical world as location or condition of the machine, the information from the virtual world as electronic documents, drawings or simulation models. Based on the above definitions CPS and IoT can be described as the factory where CPS communicates through the IoT and helps to achieve its stated goals.

ADVANTAGES OF INDUSTRY 4.0

- **Optimization:** Optimized production is a key advantage to Industry 4.0. A smart factory which consists of thousands of smart devices that are able to self-optimize production will lead to almost zero down time in production. Optimization is extremely important for industries that use high end expensive manufacturing equipments such as the semi-conductors industry. Being able to utilize the available resources fully in production constantly and consistently will definitely brings high profit to the company.
- **Customization:** Creation of customer-oriented flexible market will help meet the population's needs fast and smoothly. It helps in bridging the gap between the manufacturer and the customer. Effective communication can take place directly and automatically between both. Manufacturers don't have to communicate with companies or factories and customers. This makes the production and delivery processes faster.

- **Research:** The adoption of Industry 4.0 technologies is demanding the continuous research in various areas such as IT security and having its effects on the education in particular. Certainly, a new upgraded industry will require a new set of skills. Consequently, training and education will take a new shape which eventually provides the required skilled labor to the new upgraded industry.

CHALLENGES FACING INDUSTRY 4.0

- **Security:** The IT security risk is perhaps the most challenging aspect of implementing Industry 4.0 techniques. Online integration will give room to security breaches and data leaks. There are likely chances of cyber theft taking place. This might cost producers money and might even hurt their goodwill. Therefore, research in security is crucial.
- **Capital:** A huge investment will be needed for such transformation in a new technology. This decision of employment of huge fund needs to be taken at CEO level. Appropriate CB analysis has to be done. Even, the risks must be calculated and taken seriously. In addition, such transformation will surely require a huge capital, which alienates smaller businesses and might cost them their market share in future.
- **Employment:** It is safe to say that workers will need to acquire different or an all-new set of skills while it still remains early to speculate on employment conditions with the adoption of Industry 4.0 globally. This may enable employment rates go up but at the same time it will also alienate a big sector worker. This sector consists of workers whose work is perhaps repetitive. They might face a challenge in keeping up with the industry. Different system of education must be introduced, but it still doesn't solve the problem altogether for the elder section of workers. This is an issue that might take longer to get resolved and will be further analyzed later in this report.
- **Privacy:** privacy is not only the customer's concern, but also of the producers. In such an interconnected industry, producers also need to collect and analyze data. To the customer, this might look like a threat to his privacy. This is not only exclusive to consumers as all men and machines are interconnected and integrated in this new system. Small or large companies, which haven't shared their data so far previously, will have to work their way to a more transparent environment. Bridging the gap between the consumer and the producer will be a huge challenge for both the stakeholders..

THE FUTURE WORKFORCE

Though industry 4.0 has been promising a lot when it comes to revenues, investment, and technological advancements, yet employment still remains one of the most mysterious aspects. It seems hard to quantify or estimate the potential employment rates at this moment. What kind of new jobs will be introduced in industry 4.0? What kind of skill set a smart factory worker require to have to be able to compete in an ever changing environment like this? Will such changes lay off many workers? These questions need to be addressed.

The following are some of the important changes that will affect the demographics of employment

- **Big-Data-Driven Quality Control:** To a large extent quality control depends on statistical methods to measure whether a specific feature of a product (such as size or weight) is changing exactly in a way that can be considered a pattern. This process depends largely on collecting real-time or historical data regarding the product. However, the need for quality control workers will decrease since Industry 4.0 will rely on big data for the same. On the other side, there will be a rise in demand for big data scientists.
- **Robot-Assisted Production:** The existence of the new industry is based on the smart devices which are able to interact with the surrounding environment. This signifies that the workers who are a part of production process such as packaging, will be laid off and be replaced with smart devices equipped with sensors, cameras and actuators which can identify the product and then deliver the necessary changes for it. Such workers will be replaced with "robot coordinators" and consequently their demand will fall.
- **Self-Driven Logistics Vehicles:** As optimization focuses on transportation. The engineers use linear programming methods such as the Transportation Model to design the use of transportation. However, with self-driven vehicles along with big data assistance, so many drivers will be laid off. Moreover, self-driven vehicles allow for restriction-free working hours and higher utility.
- **Production Line Simulation:** The demand for industrial engineers who typically work on optimization and simulation to simulate productions lines will increase, while the need for optimization for transportation declines. The requirement for technology to simulate production lines before establishment will create jobs for mechanical engineers specializing in the industrial field.

- **Predictive Maintenance:** Use of smart devices will allow manufacturers to predict failures in processes. Smart machines even will be able to independently maintain themselves. This will drop the number of traditional maintenance technicians, and they'll be replaced with more technically informed ones eventually.
- **Machines as a Service:** Industry 4.0 will also allow manufactures to sell a machine as a service. Instead of selling the entire machine to the client, the manufacturer will set-up as well as maintain the machine at client's production unit while the client takes advantage of the services it provides. Consequently, this will open up jobs in maintenance and will require an expansion in sales.

CONCLUSION

Industry 4.0 is positively a revolutionary approach to manufacturing techniques. The concept of such new industry will definitely take global manufacturers to a new level of optimization and productivity. In addition to that, the customers will also enjoy a new level of customized products that may have never been available before. As discussed above, there will be a plenty of economic rewards owing to the concept of Industry 4.0. However, there are still many challenges that need to be addressed scientifically to ensure a smooth transition from the older version to the new one. Though industry 4.0 might be operating at peak level of technological advancement in manufacturing and the overall picture is promising, but it still looks as if machines are taking over the industries globally. While speculations regarding privacy, security, and employment need more study. This needs the attention and focus of large corporations and government simultaneously. Government needs to provide impetus for infrastructure, IT security, education and research. Encouragement to the research and experimentation is also the primary requisite.

Consequently, it is important to further analyze this approach in order to draw conclusions on the demographics of labor in the future. This approach will help the workers of today to prepare for a not so far future. Bringing today's and tomorrow's employees along with on this path to the future is important. This is the only way we can take advantage of the vast opportunities that these future technologies will be offering.

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CORPORATE SOCIAL RESPONSIBILITY PRACTICES IN INDIA: AN ANALYTICAL STUDY**Imran Ali and Riyazuddin**

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ABSTRACT

The current economic scenario is not very encouraging as the business organizations are going through economic slow down but Indian companies can enhance their goodwill by integrating CSR practices with core business strategies in order to improve operational efficiencies. Companies have realized that their decisions can not be depend only on profit, companies have to take into account the environmental, demographic and social factors in mind while taking business decisions. This paper attempts to reveal various innovative CSR practices and their impact on Indian society. In this study, several findings have been identified by analyzing the different range of CSR policies, practices and activities of the companies. This study provides an evaluation of what is presently being done, and proposes several ways through which the business contribution could be enhanced in order to help more people in need. Corporate social responsibility can be stated as an integral organ of Indian business arena and hence it has positive impacts on the development of Indian society.

INTRODUCTION

Drastic changes in the world over the past 20 years have created new risks for modern managers, and new mediums of building value. Business has moved to centre stage, bringing many benefits but also catching the attention of critics. Companies' impact on the environment, and on society at large, can create risks which have an important impact on financial performance. It is in the interests of companies most obviously because there is a long list of companies who have faced contention over social, ethical or environmental issues: eg BP, Shell, Premier Oil, Pepsi co, Vedanta Group, Coal India Ltd., Ford, Nike, McDonald's, Balfour Beatty and GlaxoSmithkline. CSR is more important now than ever before because business plays an increasingly major role in modern society, at every level from the local community to the international stage.

Corporate responsibility has appeared in discussion rapidly since the mid-1990s. Companies have been quick to implement the guidelines by beginning to publish useful information for investors, but more is expected from smaller public companies and more attention is to be on what is material to each company, rather than general issues. Early attempts to measure the "business case" for corporate responsibility based on revenue and cost benefits. A confluence of corporate governance and socially responsible investing (SRI) has stimulated activity in financial markets. Managers are also collaborating for CSR in specific areas like climate change, rural development, health, community welfare, blood donation and education. Social, cultural, demographic and technological changes have proven that social and environmental risks are now more important than in the past and more volatile.

Continued Growing awareness of the importance of corporate responsibility is a global trend, with notable developments in many markets like India, China, Australia, South Africa and the US. The European Union has taken a keen interest and created a Forum to advise on necessary action. It is accepted across the globe that the managerial decision-making process in business needs to take into account a wide range of criteria relating to the financial, environmental, demographic and social implications of business operations. Corporations look to their management teams to implement policies and practices that contribute to long-term responsible success of their enterprises and that fairly balance the competing claims of key stakeholders: investors, employees, customers, business partners, communities, vendors, and the environment.

Table-1: Stakeholders table for CSR

Stakeholders	CSR activities
Natural environment	<ul style="list-style-type: none"> • Judicious use of natural resources • Energy conservation • Abatement of polluting emissions • Waste management
Consumers	<ul style="list-style-type: none"> • Production of safe items and using biodegradable packages • Educating consumers on product use and disposal • Being truthful in advertising
Employees	<ul style="list-style-type: none"> • Providing fair compensation and benefits and safe work environment • Providing opportunities for personal and professional development • Having progressive human resource policies

Government agencies (local state and central government)	<ul style="list-style-type: none"> • Fulfilling obligations under regulations and statues of these agencies • Cooperating in planning and investigations • Coordinating administrative activities with these agencies
Community	<ul style="list-style-type: none"> • Providing economic stability • Safe guarding public safety • Protecting the environment • Aiding in development of social and cultural resources of the community
Media	<ul style="list-style-type: none"> • Being cooperative and truthful about issues that affect public welfare

Adapted from <http://www.ncert.nis.in/textbooks/XI/business-studies/chapter2.pdf>

Corporations want support of their management teams to implement policies and practices that contribute to long-lasting responsible success of their enterprises and that fairly balance the challenging claims of key stakeholders: investors, employees, customers, business partners, communities, and the environment. What are the values and benefits which can motivate to behave socially responsible? The following table will make it clear that CSR has measurable benefits.

Table-2: Measurable benefits from CSR

Financial Benefits/Market Growth	<ul style="list-style-type: none"> ■ Innovation ■ Reduces operating costs ■ If no measurable results, greater susceptibility to budget cuts ■ Attracts investors ■ Fund raising becomes easy ■ Financial stability
PR Benefits	<ul style="list-style-type: none"> ■ Government Relations ■ Increases customer trust, ■ Access to partnerships, NGO collaborations ■ High awareness among consumers ■ Support of the local people
HR Benefits	<ul style="list-style-type: none"> ■ Improve labor market ■ Improve society, build teamwork and skilles ■ Increase employee loyalty, pride, satisfaction (Pleasant working cilmate)
Marketing Benefits	<ul style="list-style-type: none"> ■ Brand Loyalty ■ High brand equity ■ New product launch success ■ Access to new market ■ Smooth distribution of products

Source: <http://www.abi.org.uk>

Unfortunately, this theory often remains disconnected from practical application: How will corporate leaders develop and implement these CSR practices and programs? How will corporate leaders motivate organizations to behave in a socially sustainable manner?

The concept of corporate social responsibility is not new; however it has evolved noticeably in the last few years since the phrase corporate social responsibility was coined in 1953 with the publication of 'Social Responsibility of Businessmen' by Howard R. Bowen.

The phrase has been in extensive use since the 1960's and through the 70's and 80' discussion of the concept grew. Around the same time, multinational corporations also faced anti-corporate sentiments because of environmental and human rights issues. In fact, companies faced wide-ranging boycotts of their goods and services to force change.

Though primarily CSR was seen as the moral responsibility of corporate managers, it is now extensively being accepted as being in the long term interest of corporations. Organizations as well as consumers are realizing that companies have a responsibility not only to their shareholders, but also to stakeholders including their employees, consumers, suppliers, communities, legislators and the environment. CSR now represents an organizations contribution to these stakeholders, the society at large and increasingly the global society in which they operate.

It was not easy to know the actual spending of CSR by various public and private companies since such information was not required to be maintained by companies and no provisions for CSR exists in the companies Act, 1956. But a change is expected to happen regarding CSR as new Companies Bill, 2012 has become law. Recently, it has been passed by parliament. Under Clause 135 of the new companies Bill, 2012, there is a provision of CSR that every company with net worth of Rs. 500 crore or more, or a turnover of Rs. 1000 crore or more or a net profit of rupees five crore or more during any financial year, shall form a CSR Committee of the Board comprising of three or more Directors, including at least one Independent Director, to advise activities for CSR so that a company can spend at least 2 per cent of its average net profits of the previous three years on various CSR activities.

OBJECTIVES OF THE STUDY

- To identify the major trends of CSR practices in India.
- To identify the role of government in facilitating CSR.
- To study the status of CSR practices in India.
- To understand the meaning and various models of CSR.
- To study the policies governing CSR in India.
- To study the challenges faced by CSR in India.
- To make suggestions for accelerating CSR initiatives.

LITERATURE REVIEW

The concept of corporate social performance was first coined by Sethi (1975), prolonged by Carroll (1979), and further developed by Wartick and Cochran (1985). In three level model of Sethi's 1975, the term of corporate social performance was explained, and differentiation was made between various corporate behaviors. Three tiers given by Sethi's were 'social obligation, social responsibility and social responsiveness.

In the last decade, there has been a drastic change in the attitude of business organizations toward the concern of disadvantaged and deprived group of society. This change in the attitude of business organizations has been driven both internally by corporate will and externally by increased governmental and public expectations (Mohan, 2001). Large numbers of the people agreed with the argument that business cannot succeed in a society which fails. Michael porter had expressed the same view that business and society are interrelated. Success of one is dependent on the success of other. CSR practices must have both ethical and philosophical dimensions, mainly in India where there exists a wide gap between social and economic standards of the people (Bajpai, 2001).

Infosys founder, Narayan Murthy, said that social responsibility is concerned with creating maximum value for shareholders, stakeholders, workers, consumers, the community, government and the environment. The European Communities Commission 2001 stated that socially responsible organizations not only means fulfilling legal expectations, but also going beyond compliance and doing extra efforts for investing 'more' into human capital, the environment and the relation with stakeholders (Bajpai, 2001).

The concept of CSR emphasizes more on the relationship between business and society (Davis, 1988). The main theme of CSR practices is to deal, interact and relate with stakeholders with an ethical approach (Hopkins, 2003) that does not harm or hurt any stakeholder (Sethi, 1979; Carroll, 1979; Waddock, 2004; Andrews, 1971; Buchholz and Rosenthal, 2002; Wood, 1991; Jones, 2005). Whereas there is no yet universally accepted definition of corporate social responsibility, CSR usually refers to transparent business practices adopted by companies. Business practices of the firms should be based on ethical values, compliance with legal requirements, and respect for shareholder, people, communities, and the environment. Thus, companies need to work for social development and creating an image among people that organizations are not only working for profit but also for community development.

Friedman famously argued that business of the business is business. Few management experts believed that the sole responsibility of the organization is to create maximum value for its shareholders. There is only one social responsibility of business – to use its all resources and engage in activities that creates maximum value for its shareholders (Friedman, 1970). Friedman agreed legal and ethical constraints on business activity, emphasizing that the organization should not harm or hurt society.

The philosophy of CSR in the 1950s was first and foremost based on an assumption of the obligation of Firms to society. This obligation arose more in discussion in the recent past because some researchers believed

business as an instrument of society and managers as public trustees whose foremost job was to balance often competing demands of employees, customers, suppliers, communities and shareholders (Banerjee, 2007). Carroll (1991) has refined the definition of CSR by saying that businesses have four basic responsibilities to society: economic, legal, ethical, and discretionary.

The main philosophy of CSR is that the business sector should play a major role in non-economic activities in society than merely producing goods and making profits. CSR approach supposed from the organizations to go beyond its economic activities and increase the comfort of the community, thereby making the world a better place to live (Robins, 2005). The concept of CSR has got momentum in the business world. A large numbers of organizations today are trying to form a strategic link between their business activities and their social responsibility. Business organizations are trying to develop a model which will help them to serve social as well economic objectives (Bansal and Srivastava, 2008). Business organizations are vigorously involved in CSR practices through primary as well higher education, healthcare, women empowerment, children welfare rural development, donation/charity, environment protection, supporting civil society, protection of artistic and cultural heritage and disaster management, etc.

A research on iron ore mining industry in Goa indicates that many large mining companies have their own initiatives towards environmental and social development as part of CSR practices. However, a structured CSR policy and planning is missing particularly among the small and medium players in the industry (Conway, 2003). Arora and Puranik (2004) analyzed contemporary CSR trends in India concluding that that large numbers of firms are in favour of CSR and agreed to give due place in overall corporate philosophy.

RESEARCH METHODOLOGY

This research paper is based on the secondary data sourced from journals, magazines, articles and media reports. Keeping in mind the objectives of the study, greater accuracy and in depth analysis has been maintained. Available secondary data was extensively used for the study.

Organization is willing to spend on CSR activities

	Frequency	Percent
Strongly Agree	7	70
Somewhat Agree	3	30
Neither Agree Nor Disagree	0	00
Somewhat Disagree	0	00
Strongly disagree	0	00
Total	10	100

Table-3: Organization is willing to spend on CSR activities.

CSR activities have more impact on the brand image of company than advertising

	Frequency	Percent
Strongly Agree	6	60
Somewhat Agree	2	20
Neither Agree Nor Disagree	0	00
Somewhat Disagree	1	10
Strongly disagree	1	10
Total	10	100

Table-4: CSR activities have more impact on the brand image of company than advertising.

Organization takes CSR decisions as strategic decision.

	Frequency	Percent
Strongly Agree	4	40
Somewhat Agree	3	30
Neither Agree Nor Disagree	0	00
Somewhat Disagree	2	20
Strongly disagree	1	10
Total	10	100

Table-5: Organization takes CSR decisions as strategic decision.

Organization maintains a separate department for CSR activities.

	Frequency	Percent
Strongly Agree	6	60
Somewhat Agree	3	30
Neither Agree Nor Disagree	0	00
Somewhat Disagree	1	10
Strongly disagree	0	00
Total	10	100

Table-6: Organization maintains a separate department for CSR activities.

Organization takes CSR spending as financial burden.

	Frequency	Percent
Strongly Agree	0	00
Somewhat Agree	1	10
Neither Agree Nor Disagree	0	00
Somewhat Disagree	2	20
Strongly disagree	7	70
Total	10	100

Table-6: Organization takes CSR spending as financial burden.

Organization prefers to spend on education rather than other CSR activities.

	Frequency	Percent
Strongly Agree	5	50
Somewhat Agree	2	20
Neither Agree Nor Disagree	1	10
Somewhat Disagree	1	10
Strongly disagree	1	10
Total	10	100

Table-7: Organization prefers to spend on education rather than other CSR activities.

Loss making company should also spend on CSR activities.

	Frequency	Percent
Strongly Agree	0	00
Somewhat Agree	1	10
Neither Agree Nor Disagree	0	00
Somewhat Disagree	1	10
Strongly disagree	8	80
Total	10	100

Table-8: Loss making company should also spend on CSR activities.

Government should interfere the way companies are spending on CSR activities.

	Frequency	Percent
Strongly Agree	1	10
Somewhat Agree	2	20
Neither Agree Nor Disagree	1	10
Somewhat Disagree	2	20
Strongly disagree	4	40
Total	10	100

Table-9: Government should interfere the way companies are spending on CSR activities.

Company can attain sustainable competitive advantage through CSR activities.

	Frequency	Percent
Strongly Agree	8	80
Somewhat Agree	1	10
Neither Agree Nor Disagree	1	10
Somewhat Disagree	0	00
Strongly disagree	0	00
Total	10	100

Table-10: Government should interfere the way companies are spending on CSR activities.

Government should organize training programs on CSR issues for companies regularly .

	Frequency	Percent
Strongly Agree	7	70
Somewhat Agree	2	20
Neither Agree Nor Disagree	1	10
Somewhat Disagree	0	00
Strongly disagree	0	00
Total	10	100

Table-11: Government should organize training programs on CSR issues for companies.

IMPACT OF CSR PRACTICES ON RURAL DEVELOPMENT

Majority of India's population live in villages and these villages are in a state of neglect and underdevelopment. The problems of hunger, poor education, ignorance, employment opportunities, ill health, high mortality and poor infrastructure are most sharp in rural areas. This is not only because of shortage of financial resources but also because of defects in our planning, Process and investment pattern. India has the potential to grow and to meet these challenges in rural areas. However, the efforts of Governments may not be sufficient to fulfill basic needs of its citizens. The corporate sector has played a major role to play in ensuring private investment flows to rural areas that have been left out of the development process so far and also to work for sustainable development of rural areas in general. We have taken CSR practices of various companies from web page and have attempted to analyze the impact of these CSR practices on rural development.

Table-12.Details of CSR initiatives of Indian companies

Company	CSR Initiatives
Vedanta Alumni Ltd.	Capacity building
	Health awareness camps, computer education
	Child care centers, education to all children, computer education
	Environment protection
	Renovation of village schools
Aditya Birla Group	Employment generation schemes
	Health care, safe drinking water
	Education and training
Dr. Reddy's Labs	Job oriented course to youth
	Hospitality services
	Education. Child rights program
Tata Steel	Enterprise promotion
	Material & child health, AIDS awareness, hospital on wheels
	Fellowship, coaching programs
	Land & water management, rain water harvesting
	Construction of school, hospital, pump, tubewell
Lupin India	Developing new skills, extension & infield training
	Family welfare, immunization, health camps, TB eradication
	Education for all, women empowerment
	Water management and conservation
	Schools, community facilities, low cost housing, training centres
ICICI Bank	Micro financial services

	Early child health, improve nutrition among women & children
	Universalization of elementary education
Ambuja Cement Ltd.	Capacity building, generation of alternative source of livelihood
	AIDS awareness camps
	Promotion of education
	Water management and conservation
Coca-cola India Inc	Education for children
	Sustainable water management
	Construction of dams, schools
Bharat Petroleum	SHG for income generation, mushroom cultivation
	Health camps, AIDS awareness camp
	Primary education, coaching
	Tree plantation
	Repair & maintenance of bore wells, schools, community centers
NTPC	Income generation
	Health care
	Education, Vocational training
SAIL	Training for income generation
	Blood donation, distribution of condoms
	Tree plantation
	Construction and repair of pucca roads, bore wells, hand pumps
Asian Paints	Immunization programmes for children
	Schools for rural children
	Improving infrastructure and sanitation facilities in local schools
Indian Oil	Income generation
	Health and family welfare, sanitation
	Promoting education
	Environmental protection
Satyam Computers	Income generation
	Health care
	Primary education
	Environmental protection
ITC	Primary education
	Livestock development
	Social forestry
Citi group	Women empowerment
	Rehabilitation
	Education
	Health

CONCLUSION

CSR has become an integral part of business world. Business organizations utilize resources of society and depend on these resources for its functioning. CSR practices contribute in terms of enhancing the welfare of society. Companies expect from society to purchase and consume their products and society expect from business organizations to discharge CSR activities. It has been observed that society and businesses has become more integrated and success of one depend on another. Now, Companies cannot afford to ignore the concept of corporate social responsibility. Keeping in mind the current business requirements, companies would have to change their strategies. Their operations cannot be based on only for profit motive, factors like community development, environment protection and education will have high impact on organization's business philosophy. In the past few decades, we were fighting issues like labor laws, factory act and child labor. But it has been observed in the recent past companies believe in maintaining healthy relationship with workers. Nowadays, companies want to achieve their business goal with the achievement of personal goals of workers. Companies are not only focusing on profit but also on consumer satisfaction, community development, rural development, climate change, women empowerment, blood donation, and education. Based on this study, it can

be concluded that companies have revealed high concern for society. They want to conduct business in society in such a way that their business operations do not have any bad impact on society.

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ASSESSMENT OF STUDENTS TOWARDS SOCIAL MEDIA USAGE

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ABSTRACT

Social media is becoming the integral part of our lives. It has become the major source of information and communication for the students. But it has been observed that the students spend much of their time on social media which leads to their phubbing behavior when they are with friends and family. This study was conducted to examine the positive and negative consequences of social media on students in terms of their behavior and learning. Study is based on the structured review of literature with an intention to provide an integrated view of literature. The R software has been used to analyse the literature. A conceptual model was proposed to have a thoughtful insight about the effect of social media on the student's behavior and their learning outcomes. Results reveal that use of social media affects the learning of the students positively as well as negatively but there is a need to explore and study the effects of social media on the social behavior of the students as very few studies have been done in this domain. This study aims to identify the use and effect of social media in terms of the learning and the social behavior of students. The literature has been reviewed by various contexts and themes. Results revealed the gap in the existing literature which suggests more exploration in the area of social media usage in relation with social behavior.

Keywords: Social media, phubbing, social behavior, learning

INTRODUCTION

Social media are computer based technologies that facilitates creating and sharing of information, ideas and other forms of expression via virtual networks. It is the collective online communication channel which includes micro-blogging, social networking, wikis etc. In simple words, social media is a web based tool which facilitates people to interact with each other or for sharing information and receiving the information.

Use of social media has grown tremendously in the last few years. We can't imagine our lives without smart phones and using social media now days. Lot of things can be learnt through social media from education to information. Social media has become the major source of information or knowledge for students as well as for students. It provides a platform for learning, communication etc. and so the teaching methodology is gradually transforming towards e-learning or web based learning. Social media and Social Networking Sites facilitate students to interact with each other and to express their creativity. But it is generally observed that the students and adolescents spend most of their time on social media or social networking sites which makes a range of positive and negative impact on behavior, health and their well-being.

For content contributors, the benefits of participating in social media have gone beyond simply social sharing to building a reputation and bringing in career opportunities and monetary income. But the students, especially adolescents use social media for sharing their images, videos or chats which increases their virtual interaction but at the same time they ignore the family and friends connections in real. Extreme use of social media or networking sites like Facebook, Whatsapp, Instagram etc. among the students is distracting them from their social circle and the relationships with their family. It can also be observed by phubbing behavior of the students when they are with their friends or when they are with their family. Phubbing is the action of ignoring others during social events by using smart phones. This kind of behavior is a major concern especially for the family members and the person who is being snubbed.

REVIEW OF LITERATURE

Various research studies found the influence of social media and social networking sites on the behavior of the students and adolescents. Use of social networking sites result into social circle declination (Kruat et al. 1998). Studies also found that internet users tend to spend less time with friends and family (Ranny, 2000). Research also shows that Generation Y seems to lose an actual social interaction, had an anxiety and feel frustrated (Busko, 2009).

Researchers have focused on the various antecedents of the phubbing behavior of the people (Varoth Chotpitayasunondh & Karen M Douglass, 2016). Findings revealed that internet addiction, fear of missing out, self-control and smart phone addiction leads to phubbing behavior. Further, aggression and lack of attention have been found to be associated with the internet addiction (Davey & Davey, 2014). Clinical reports of American Academy of Pediatrics state the benefits and risks of using social media on the children, adolescents and the families. According to this report, the benefits of social media includes socialization, communication,

learning opportunities and accessing health information while the risks includes cyberbullying, online harassment, sexting, facebook depression. Studies also noted the associations of students media usage and engagement in risk behaviors like problematic alcohol use and illicit drug use (Gabielli G. Groth., et al., 2016)

Researchers found that the intensity of Facebook use appears to be related with personal contentment, greater trust, and participation in civic and political activities among college students. The students with high facebook engagement participates more in the university level activities but use of facebook for educational purpose decrease the student's concentration (Tugberk K., et al., 2016). Some research also reported unfavorable consequences of phubbing in the romantic context, establishing smartphones as the cause of conflict (e.g., Roberts and David, 2016), lower relationship satisfaction and reduced wellbeing (e.g. McDaniel and Coyne, 2016). Specifically, "generation Y" respondents report negative jealousy-related emotions as a result of their partner's latest phubbing episode (Schmitt, 1994; Tov-Ruach, 1980; Lazarus, 1991), including perceived loss of attention, anger and sadness. Adolescents and college students who spend more time online disclose more information (Christofides et al., 2009; Christofides et al., 2012), which can distort intimate relationships (Lewis and West, 2009). Interpersonal relationships may be susceptible to the interface of technology which may lead to interruptions in face to face conversations (McDaniel and Coyne, 2016). Nakamura (2014) noted that gazing at the phone is a form of non-verbal behavior/ communication. It may communicate as if the person is busy or the phone user is ignoring other acquaintances. Such behavior may also give a feeling to the observer of being hold or wait. The phones users are perceived differently by different people which influences not only face to face communication but also power the relationships between participants.

Extant literature also focused on the effects of social media on learning. Participation in social media has many positive aspects in terms of learning. Some benefits from using social media networks includes sharing information and ideas but it also has negative aspects as it could negatively affect the academic performance of the students. It could further negatively influence the academic life of the students (Badri, M., et al., 2017). Further the negative aspect was supported by the study of Abraham E. F., et al., 2015 who found that excessive use of social media disrupts the lecture learning and negatively impacts their academic achievement. Study of Rebecca S., et al., (2016) focused on the effects of ostracism and inclusion of social media on the young people's perception. Study found that social media ostracism was perceived by students as threatening to mood while there are possible benefits of social media inclusion to the student's behavior and their well-being. According to the study of Wilfred W.F Lau, there are potential negative impact of social media on student's social well-being which includes cyber bullying, sense of belongingness and well-being. Ashraf J., et al., 2012 observed various challenges and opportunities of using social networking in education. As per the study challenges include privacy, real friendship and taking away time (amount of time spent online with each other) while opportunities include flexibility, convenience and accessibility. Perceived usefulness and perceived enjoyment were found to be the important determinants of student's intention to use social networks for learning. Students who perceive social network as useful and enjoyable have positive attitude towards using them which in turn contributes to their learning (Nevine M. Labib & Rasha H. A. Mustafa, 2015). Studies also observed there is the effect of different learning styles on the student's intention to use social media for learning. Further it was found that there are significant effects of self on the intention to use social media for learning. For instance, students having the participatory style focus more on self than the students with collaborative style of learning (Vimala B., et al., 2015). Using YouTube and mobile devices as a medium promotes ubiquitous learning. Further the habit of self-learning and revision is developed if such technology is involved in teaching (Hsing -chin Lee, 2014). Studies also observed that use of social media applications in teaching engages the student to improve his learning performance which in turn improves their satisfaction. Some studies noted that use of phones by the students in classrooms may underestimate the effect of this behavior has on the learning process. Studies also found the adverse effects of phubbing on learning (Abramova, O., et al., 2017)

RESEARCH METHODOLOGY

The study is exploratory in nature. Broad analysis of Literature Review on Social Media has been done to find out the integrated view of literature. Total 54 research papers were retrieved out of which only 43 were found to be relevant and therefore further analysis has been done on these 43 research papers. Since the study was focused on the behavioral and learning outcome of social media among students, so the key words like social media, social behavior, phubbing and communication with family were used to find out the relevant papers for analysis. Most of the articles for this research paper were collected through online sources. Further, the R software has been used for the analysis of the literature through using the functions of word cloud, tree map, word frequency plots, etc.

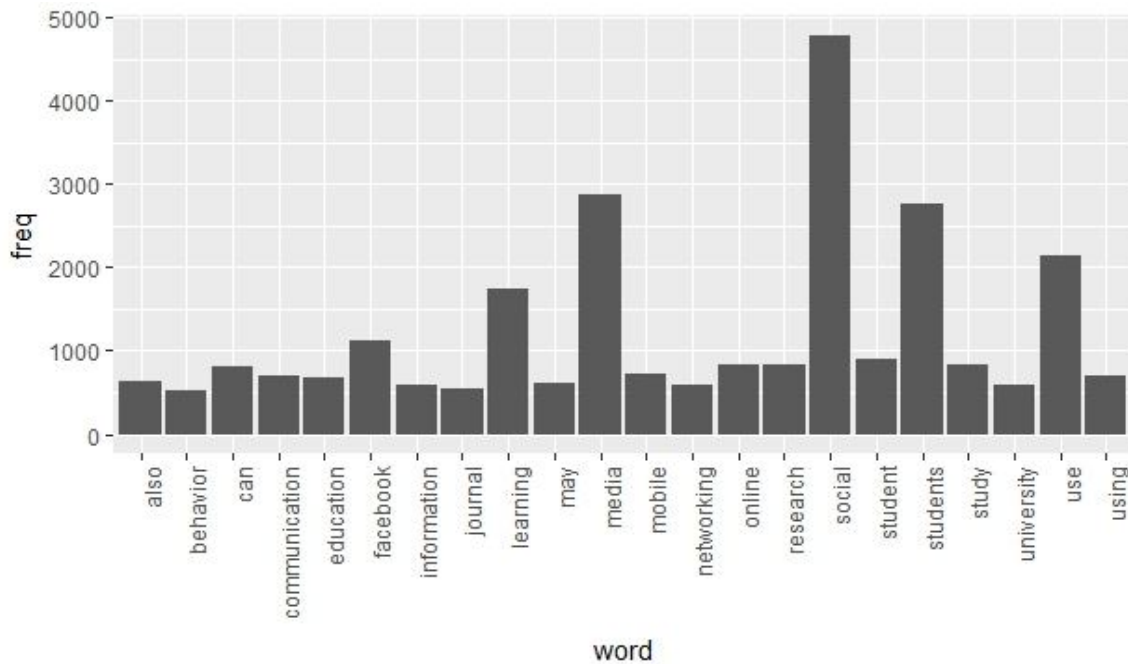


Figure-2: Frequency plot of the most frequently used terms in the literature

The above figure highlights the graph between the words and their frequency. It is clear from the graph that the most frequently used terms are social, media, students, learning and use.

The tree map is extracted using R software on 43 research papers related to social media usage which is shown below:

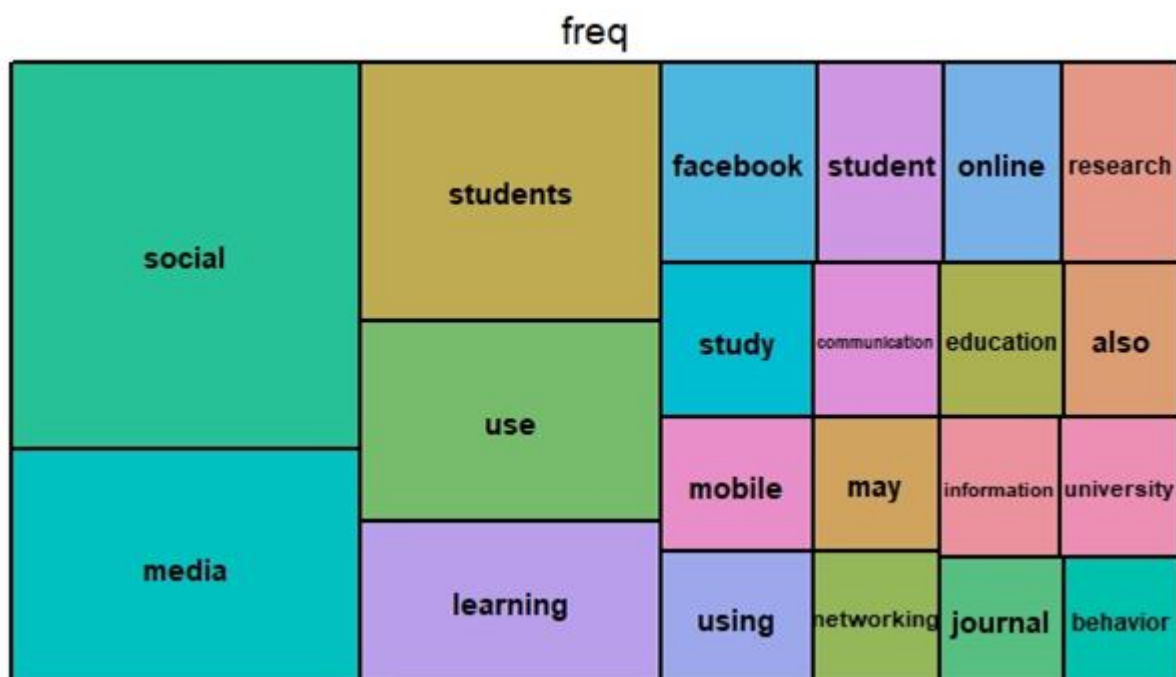


Figure-3: Tree map

It is clear from the tree map that the words social and media are very closely related with the terms students and learning. Also these terms have been used highly used in the literature reviewed by the researcher. Moreover, relation between social media and behavior need to be explored as there is a gap between these terms as per the tree map.

On the basis of the review and analysis, following findings can be inferred.

First, lots of studies have been done on social media usage among students and the effect of the same on learning outcomes, but there is little research done in Indian context. Out of the 43 research papers reviewed, more than half focused on the learning outcomes whether positive or negative.

Second, very few studies have been found on the social media and the social behavior of the students. Although there are studies on social media usage and the academic behavior but these do not include the behavior towards peers or the family.

Third, according to the analysis the top five words are Social, media, use, learning and students which actually sum up and reinforce the central idea of the literature reviewed. But at the same time reflects the gap in social media and social behavior which suggests for further exploration in this area.

CONCLUSION

Social media has become a major source for learning and teaching. It has many advantages because of easy access to every type of information and that is why majority of the students use it now days for learning. But if we look to another aspect, extreme use of it distracts the person from the social interaction. Students now days are engaged with phones all the time, connecting with people online but ignoring the real connect with the people around them.

This study has been done to identify the use and effect of social media in terms of the learning and the social behavior of students. The literature has been reviewed by various contexts and themes. Results revealed the gap in the existing literature which suggests more exploration in the area of social media usage in relation with social behavior.

Social media is a perennial field of research. However, despite of vast literature in this area, the clear picture in relation with behavior is missing. Most of the studies focus on the social media in relation with the learning, challenges or opportunities etc. But the literature is oblique about the relationships of social media and behavior with the family, friends or colleagues. Thus, more studies are required to be done to identify the inconclusive findings.

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INVOLVEMENT RULE MINING ALGORITHMS

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ABSTRACT

The paper deals with could be a widespread and well-accepted methodology for locating fascinating relations between variables in giant databases. AN association rule implies sure association relationships among a collection of objects Association rules are utilized these days in several application areas together with internet usage mining, intrusion detection and bioinformatics. It analyzes the algorithms of Apriori, prophetic Apriori and Tertius algorithms.

Keywords: Algorithm, bioinformatics

INTRODUCTION

In data mining, association rule learning could be a widespread and well-accepted methodology for locating fascinating relations between variables in giant databases. Association rules are utilized these days in several areas together with internet usage mining, intrusion detection and bioinformatics (Dong Liu, et. al., 2005) (Moreno MN, et. al., 2008) (Makio Tamura, 2008) (Kurundkar, et.al., 2011) (Luo Jianxiong, 2000) (Yuefeng Li, 2006) (Vikas Markam, 2012). Piatetsky-Shapiro describes analyzing and presenting sturdy rules discovered in databases victimisation completely different measures of power (Piatetsky-Shapiro, 1991). power measures play a very important role in data processing, despite the type of patterns being deep-mined. These measures area unit supposed for choosing and ranking patterns per their potential interest to the user (Lau A, et.al, 2003). smart measures conjointly permit the time and space costs of the mining method to be reduced. supported the construct of sturdy rules, association rules for locating regularities between merchandise in giant scale dealing information recorded by location (POS) systems in supermarkets was introduced. for instance, the rule = found within the sales information of a market would indicate that if a client obtains onions and vegetables along he's seemingly to additionally buy rice. Such info may be used because the basis for selections regarding selling activities like promotional rating or product placements.

DATA MINING

The world is deluged with varied styles of information-scientific data, environmental information, monetary information and mathematical information. Manually analyzing, classifying, and summarizing {the information|the info|the information} is not possible as a result of the unbelievable increase in data during this age of internet work and information sharing. This analysis investigates the basics of information mining and current analysis on group action uncertainty into data mining in an attempt to develop new techniques for incorporating uncertainty management in data mining.

Briefly speaking, data processing refers to extracting helpful info from immense amounts of information. several alternative terms area unit being employed to interpret data processing, like data mining from databases, data extraction, information analysis, and information anthropology. Nowadays, it's normally united that {data mining|data methoding} is a necessary step within the process of data discovery in databases, or KDD. during this paper, supported a broad read of information mining practicality, {data mining|data methoding} is that the process of discovering fascinating data from giant amounts of information hold on either in databases, information warehouses, or alternative info repositories.

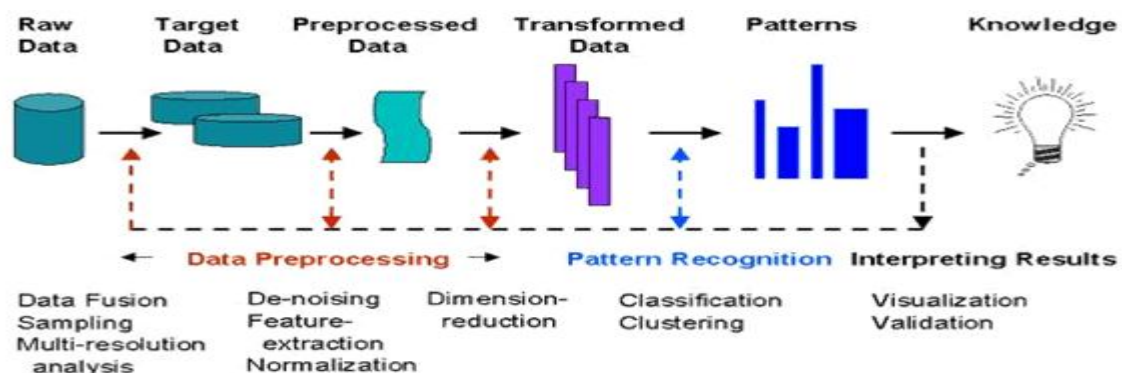
**An iterative and interactive process**

Figure-1.1: Knowledge Discovery in Databases

BACKGROUND

Necessity is the mother of invention. Since ancient times, our ancestors have been searching for useful information from data by hand. However, with the rapidly increasing volume of data in modern times, more automatic and effective mining approaches are required. Early methods such as Bayes' theorem in the 1700s and regression analysis in the 1800s were some of the first techniques used to identify patterns in data. After the 1900s, with the proliferation, ubiquity, and continuously developing power of computer technology, data collection and data storage were remarkably enlarged. As data sets have grown in size and complexity, direct hands-on data analysis has increasingly been augmented with indirect, automatic data processing. This has been aided by other discoveries in computer science, such as neural networks, clustering, genetic algorithms in the 1950s, Decision trees in the 1960s and support vector machines in the 1980s.

Data mining is the process of applying these methods to data with the intention of uncovering hidden patterns. Data mining or data mining technology has been used for many years by many fields such as businesses, scientists and governments. It is used to sift through volumes of data such as airline passenger trip information, population data and marketing data to generate market research reports, although that reporting is sometimes not considered to be data mining.

Data mining commonly involves four classes of tasks: (1) classification, arranges the data into predefined groups; (2) clustering, is like classification but the groups are not predefined, so the algorithm will try to group similar items together; (3) regression, attempting to find a function which models the data with the least error; and (4) association rule learning, searching for relationships between variables.

According to Han and Kamber [2015], data mining functionalities include data characterization, data discrimination, association analysis, classification, clustering, outlier analysis, and data evolution analysis. Data characterization is a summarization of the general characteristics or features of a target class of data. Data discrimination is a comparison of the general features of target class objects with the general features of objects from one or a set of contrasting classes. Association analysis is the discovery of association rules showing attribute-value conditions that occur frequently together in a given set of data. Classification is the process of finding a set of models or functions that describe and distinguish data classes or concepts, for the purpose of being able to use the model to predict the class of objects whose class label is unknown. Clustering analyzes data objects without consulting a known class model. Outlier and data evolution analysis describe and model regularities or trends for objects whose behavior changes over time.

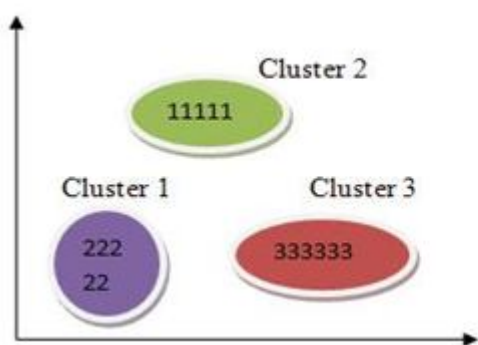


Figure-1.2: Cluster Analysis for numbers

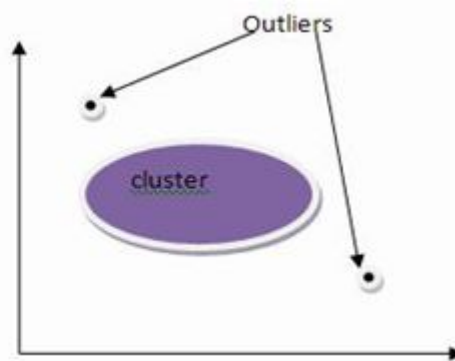


Figure-1.3: Outlier Analysis

CASE STUDIES

A few case studies pertaining to breast cancer, mushroom, larynx cancer, zoo, sunburn, imaginary disease, contact lenses, MONK, soya bean and titanic datasets are executed to find the utility of association rule mining. The data sets are categorical in nature. The arff conversion of the data set was provided by Håkan Kjellerstrand.

The breast cancer domain was obtained from the University Medical Centre, Institute of Oncology, Ljubljana, Yugoslavia. M. Zwitter and M. Soklic have provided the data (Michalski RS, et.al, 1986). This data set has 286 instances described by 9 attributes + one class attribute. The set includes 201 instances of one class and 85 instances of another class.

The mushroom domain was obtained from The Audubon Society Field Guide to North American Mushrooms. G. H. Lincoff and Alfred A. Knopf have provided the data (Lincoff GH, et.al, 1981). Jeff Schlimmer donated the data to UCI Machine Learning Repository. This data set has 8124 instances described by 22 attributes + one class attribute. This set includes 4208 instances of one class and 3916 instances of another class. The larynx cancer domain was obtained from Mendenhall, WM, Million RR, Sharkey DE and Cassis NJ. (Mendenhall

WM, et.al, 1984). This data set has 41 instances described by 1 attribute + one class attribute. The set includes 23 instances of one class and 18 instances of another class.

The zoo domain was obtained from Richard Forsyth. This data set has 101 instances described by 16 attribute + one class attribute. The set includes 58 instances of one class and 43 instances of another class. The sunburn domain was obtained from Patrick Winston (Winston, 1992). This data set has 8 instances described by 4 attribute + one class attribute. The set includes 5 instances of one class and 3 instances of another class.

The imaginary disease domain is derived from Simon Langley (Langley, 1992). This data set has 10 instances described by 4 attribute + one class attribute. The set includes 6 instances of one class and 4 instances of another class.

The contact lens domain was obtained from Cendrowska J (Cendrowska, J, 1987) and donated by Benoit Julien to UCI Machine Learning Repository. This data set has 24 instances described by 4 attributes + one class attribute. This set includes 4 instances of one class and 5 instances of second class and 15 instances of third class.

The MONK domain was obtained from Sebastian Thrun. This data set has 124 instances described by 6 attribute + one class attribute. The set includes 62 instances of one class and 62 instances of another class.

The soya bean domain was obtained from Michalski RS and Chilausky RL. (Michalski RS, et.al, 1980) and donated by Ming Tang and Jeff Schlimmer to UCI Machine Learning Repository. This data set has 683 instances described by 35 attribute + one class attribute. The set includes 19 classes with the number of instances in the classes being 20, 20, 20, 88, 44, 20, 20, 92, 20, 20, 20, 44, 20, 91, 91, 15, 14, 16, 8 respectively.

The titanic domain was obtained from Dawson, Robert J. MacG (Dawson, et.al, 1995). This data set has 2201 instances described by 3 attributes + one class attribute. This set includes 711 instances of one class and 1490 instances of another class.

Further an attempt is made to suggest the suitability of the different algorithms of association rule mining to a given case study. In what follows now we discuss different case studies pertaining to breast cancer, larynx cancer gene sequences and other datasets by employing Apriori, PredictiveApriori and Tertius Algorithms respectively.

For immediate and easier reference each of the data set are assigned numbers and given below. Table 1.1: Data set Number Association

Data Set	Number
Sunburn	1
Imaginary Disease	2
Contact Lenses	3
Larynx Cancer	4
Zoo	5
Monk 3	6
Monk	7
Monk 1	8
Breast Cancer	9
Soya beans	10
Titanic	11
Mushroom	12

EXPERIMENT ANALYSIS

Execution of Apriori Algorithm

Parameter Selection

The basis for selecting various parameters is:

- Minimum support is the percentage of task relevant data transactions for which a pattern is true. The lower bound for the minimum support has a default value set to 0.1.

- Confidence is the certainty measure for association rules. If A and B are sets of items in any transactions, confidence is the percentage of transactions containing A that also contains B in an association. In Weka by default it has a value set to 0.9.
- The number of cycles is the number of iterations taken to generate the best rules. iv. The default number of best rules is kept at 1000.

Table-1.2: Execution of Apriori Algorithm

Sl. No	No. of instances	No. of attributes	Run Information					
			Min support	Min confidence	No. of cycles	No. of large frequent item sets L	Avg. size of L	No. of best rules found
1.	8	5	0.13	0.9	18	5	36	455
2.	10	5	0.1	0.9	18	5	19	237
1.	24	5	0.1	0.9	18	4	42	83
4.	41	2	0.1	0.9	18	2	3	1
5.	101	18	0.4	0.9	12	8	90	1000
6.	122	7	0.1	0.9	18	4	50	19
7.	124	7	0.1	0.9	18	4	50	11
8.	169	7	0.1	0.9	18	3	55	1
9.	286	10	0.5	0.9	10	4	4	536
10.	683	36	0.7	0.9	6	6	37	1000
11.	2201	4	0.1	0.9	18	4	9	24
12.	8124	23	0.45	0.9	111	6	55	1000

OBSERVATIONS

The above table reveals that while using Apriori Algorithm to different case studies

- As the minimum support reduces, the number of cycles increases.
- In general, the average size of large item sets depends on the minimum support.
- The number of best rules found for any data set is independent of the number of instances and attributes but generally depends on the minimum support.
- The number of cycles needed to generate the best rules is independent of the number of instances and attributes.
- The number and size of frequent itemsets generated by strong association rule in Apriori decreases with the increase in datasets.
- When the minimum support is low and the number of cycles taken is more the number of best rules generated are always not equal to the default value.
- When the number of attributes is above 15(see Sl. No.5, 10 and 12 in Table 1.2) the number of best rules obtained is as per the default value.
- In other cases, when the number of attributes is small the number of best rules are not obtained according to default value.
- The run information for this algorithm is independent of the minimum support and confidence value for different datasets.
- The number of rules to be found is kept at 10000

Table-1.3: Execution of PredictiveApriori Algorithm

SL No	No. of instances	No. of attributes	Run Information / No. of best rules found
1.	8	5	44
2.	10	5	100
1.	24	5	242
4.	41	2	8
5.	101	18	10000
6.	122	7	6521
7.	124	7	9745
8.	169	7	6767
9.	286	10	10000
10.	683	36	10000
11.	2201	4	331
12.	8124	23	10

OBSERVATIONS

The above table reveals that while using PredictiveApriori Algorithm to different case studies

- The default value of 10000 rules is not found for all case studies which imply that the best rules found depend on the data set.
- A general rule cannot be formed for this algorithm as formed in Apriori algorithm.
- It returns the „n“ rules that maximize the expected accuracy where n is the number of best rules (see Sl. No.5, 9 and 10 in Table 1.3).
- In most cases the number of attributes being selected governs the number of best rules selected. The rules formation does not consider strange instances and may be termed as outliers.

This algorithm finds the rule according to the confirmation measures (Flach PA & Lachiche N 2001). It uses first order logic representation and includes various option like class Index, classification, confirmation Threshold, confirmation Values, frequency Threshold, horn Clauses, missing Values, negation, noise Threshold, number Literals, repeat Literals, roc Analysis, values Output.

The basis for selecting various parameters is

- The number of rules generated depends on the number of hypotheses considered.
- The number of hypotheses explored is the number of rules that were “potentially interesting” and were considered for adding to the results or refining. This corresponds to the number of rules taken from the agenda in the algorithm.
- The run information for this algorithm is different from the other association algorithms.
- By default, the number of confirmation value is 1000 which gives the number of hypothesis considered and explored.
- The number of best rules found is also dependent on the number of confirmation value.

Table-1.4: Execution of Tertius Algorithm

SL No	# of instances	# of attributes	Run Information		
			# of hypotheses considered	# of hypotheses explored	# of best rules found
1.	8	5	3127	3127	299
2.	10	5	1596	1596	80
1.	24	5	2760	2760	894
4.	41	2	16	16	6
5.	101	18	4657888	2259393	4911
6.	122	7	29053	28510	1556
7.	124	7	29094	28546	1520
8.	169	7	29298	29178	1389
9.	286	10	514471	327637	1199
10.	683	36	7847055	2969128	1439
11.	2201	4	868	868	128
12.	8124	23	8179491	3787131	1914

OBSERVATION

The above table reveals the following information while using Tertius Algorithm to different case studies

- For non-numeric datasets as the number of attributes increases the number of hypotheses to be considered also increases.
- Though the number of hypothesis considered for numeric dataset is more the number of best rules formed is not more than 5000 for any data set.
- When the number of hypothesis is too large they are not fully explored.

Table-1.5: Comparative analysis from all the three algorithms

Sl No	# of instances	# of attributes	# of best rules found		
			Apriori Algorithm	Predictive Apriori Algorithm	Tertius Algorithm
1.	8	5	455	44	299
2.	10	5	237	100	80
1.	24	5	83	242	894
4.	41	2	1	8	6
5.	101	18	1000	10000	4911
6.	122	7	19	6521	1556
7.	124	7	11	9745	1520
8.	169	7	1	6767	1389
9.	286	10	536	10000	1199
10.	683	36	24	331	1439
11.	2201	4	1000	10	128
12.	8124	23	455	44	1914

OBSERVATIONS OF ALL THREE ALGORITHMS

- The default value kept cannot be attained for all case studies for all the three algorithms.
- The number of best rules required depends on the number of attributes dataset.
- The datasets do not necessarily give the default number of rules for all the algorithms. iv. When the number of attributes are less the number of best rules formed is less with all the three algorithms.

The case studies considered in this paper are analyzed and executed from the Weka software to generate strong association rules using candidate generation with the different association rule mining algorithms and the findings are as below.

Suppose D denotes the data set and t denotes the time and i denotes the items that are generated then,

- As the minimum support reduces the number of cycles increases as shown in Table 1.2. ii. In general, the average size of large item sets depends on the minimum support.
- The number of best rules found for any data set is independent of the number of instances and attributes but generally depends on the minimum support.
- The number of cycles needed to generate the best rules is independent of the number of instances and attributes.
- During the execution it has been observed that the execution time of Apriori algorithm increases as the data set increases i.e. $D \propto 1$
- It has also been observed that the number and size of frequent itemsets generated by strong association rule in Apriori decreases with the increase in datasets i.e. $D \propto 1/i$.
- As the number of dataset increases Apriori requires more memory that leads to space complexity.
- Apriori may need to generate a huge number of candidate sets.
- It may need to repeatedly scan the database and check a large set of candidates by pattern matching. This is especially the case for mining long patterns.

- When the minimum confidence is low and the number of cycles taken is more the number of best rules generated are always not equal to the default value.
- The PredictiveApriori returns the „n“ number of best rules that maximize the expected accuracy.
- In general, the number of attributes being selected governs the number of best rules selected.
- The user has the option to specify how many rules have to be presented in PredictiveApriori and this is a more natural parameter to be used than minimum support and minimum confidence used by Apriori.
- The PredictiveApriori algorithm checks for redundancies.
- During execution it has been observed that the PredictiveApriori algorithm has a favourable computational performance since it uses dynamic pruning technique (Scheffer T 2001).
- In the Tertius algorithm the number of hypothesis considered and explored are directly proportional to the number of attributes and the number of instances.
- None of the three algorithms can handle numeric data. They can only use nominal attributes and datasets with numeric attributes have to be first discretized using the Weka toolkit. When discretization is done, the number of nominal values should be kept low otherwise the search space might be too wide for the search to work effectively.
- The model proposed for this mining is as shown in Figure 1.4 and is self-explanatory.

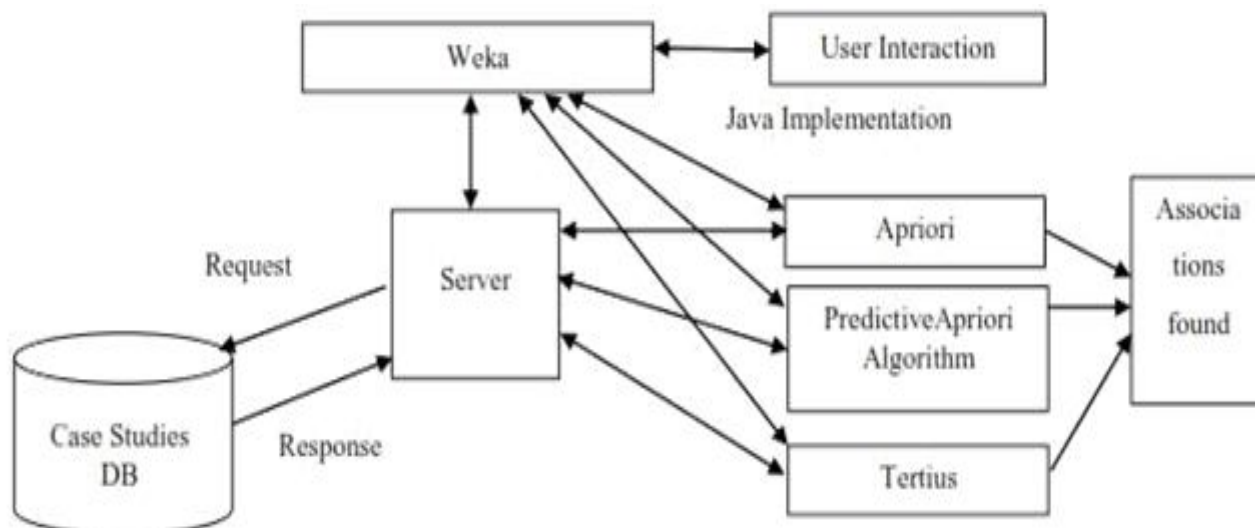


Fig-1.4: Architecture for implementing the Association rules on Datasets using Weka

CONCLUSION

The Apriori Algorithm is the simplest algorithm to be used in association rule mining but the efficiency of the algorithm does not match with the size of the database to be analyzed. The Apriori Algorithm iteratively reduces the minimum support until it finds the required number of rules with the given minimum confidence. This increases the execution time and size of the frequent itemsets. In the Predictive Apriori Algorithm a rule is added if the expected predictive accuracy of the particular rule is among the „n“ number of best rules and it is not a part of another rule with at least the same expected predictive accuracy. It searches with an increasing support threshold for the best 'n' rules concerning a support-based corrected confidence value. In Tertius Algorithm the search starts with an empty rule. The refinement operation is just adding an attribute-value pair either in the head or in the body of the rule. The algorithm is very slow and ways of making it run faster has to be considered.

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ROLE OF DIGITIZATION OF SUPPLY CHAIN IN ENTREPRENEURIAL GROWTH

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ABSTRACT

Due to opening up of the International Markets for almost all manufacturers and businessmen around the world, cost cutting and quality improvement have become an essential management exercise for the survival of any Business Organization. The Digitization approaches have significant impact on total cost of the product and services in supply chain activities. Digitization deals with the entire issues starting from the sourcing of raw-materials to deliver the goods in the hands of the end customers through SCM. The timely and appropriate managerial decisions in the era of the digital world will provide a cutting edge advantage to the business organization as well as development to the entrepreneurs.

The literature review indicates that Supply Chain constituents contribute about 30-40% of the total cost incurred by the manufacturer or the service providers so these cost can be minimized without compromising on the quality thus giving an edge over the competitors. The purpose of this paper is to create awareness among the entrepreneurs about the various linkages of Supply Chain through Digitization process. Entrepreneurs can use effective management techniques to optimize the costs and reduces wastages.

This paper is also an endeavor to discuss the various approaches & components of Digitization and integration of the Supply Chain activities to derive the maximum benefits in the best interest of the business enterprise, thereby enhancing the profits as well as other shareholders wealth and prosperity of the organization.

INTRODUCTION

The entrepreneurial resource is now being considered as a critical ingredient and catalyst for economic growth and development of a country. It has immense employment potential. Scholars, academicians and policy makers must recognize that the well planned entrepreneurship practice will fetch richer and positive dividend will help in sustainability and growth of the enterprise. The Digitization is equally important with other management techniques because, it deals with the entire activities related to the sourcing of raw materials to the delivery of the finished product in the hands of the ultimate customers and attending the grievances/complaints feedback thereof with the digital concepts. The effective Digitization will help in effective utilization of resources and reducing the cost of product & service delivery.

OBJECTIVE OF THE STUDY

The main objective of the study is to making awareness to the entrepreneur about the various linkage of supply chain with the Digitization, so that they may use effective management techniques to optimize the supply chain cost, as it cost about 60-70% of the total cost incurred by manufacturer or the service provider can be minimized without compromising on the quality thus giving an edge over the competitors. The research methodology of the paper based on the secondary data sourced from various articles books and journals available on entrepreneurship and supply chain management. Keeping in view the objective of the study was centered at identifying the various activities involved in supply chain management. Based on the outcome of the study, a comprehensive supply chain model has been developed. This model will provide a complete overview of supply chain and its linkage so that the supply chain structure could be reviewed at a glance and effective management decisions may be taken to optimize the supply chain costs.

SCOPE FOR THE FURTHER RESEARCH

The present study is a qualitative aspect towards the objective to the study. However a detailed quantitative research can be carried out on the given theme incorporating the cost of supply chain through e-commerce and other components of cost of production. It also works where an Entrepreneurs want to grow their businesses with the innovative tools and incorporation of digital activities to deliver quick and fastest services to the end user.

LIMITATIONS TO THE STUDY

The study is limited to the qualitative aspect towards the subject, as most of the entrepreneurs are hesitant in disclosing the information about them and therefore it is difficult to conclude anything based on their response. Secondly finance is the vital force needed to start and organize any enterprise; it is difficult to get the financial information from any entrepreneur as they feel insecure in sharing financial data about their enterprise.

DIGITIZATION AND ENTREPRENEURSHIP

The effective E-Commerce is one of the important avenues to reduce the cost of product / services, thereby increasing the profits as well as the prosperity of an enterprise. Now, Digitization is the combination of digital business processes to customer specific business with the software integration systems. It is helpful for improving the transformation process that finds the raw components to make the product and services and deliver it to the customers with in the time. Process of Digitization is to converting the data or information into a digital form. In this information is organized into isolated units of data (called bit s) that can be separately works (usually in multiple-bit groups called byte s). This is the data that computers and many devices with computing capacity (such as digital camera s and digital hearing aid s) in the form of binary can process. Text and images can be digitized similarly: a scanner captures an image (which may be an image of text) and converts it to a JPG, PDF format. To preserve, access, and share the information is easier through Digitizing. For example, the people who visited physically to a location and collected an original historical document may only access by himself or herself, but when the document gets digitized, it can be accessible for all at worldwide.

VIEW OF SCM AVAILABLE IN LITRATURE, GIVEN BY VARIOUS ASSOCIATIONS

SCM has been defined as the integration of key business process from end user through original suppliers that provides products, services, and information that adds value for customers and other stakeholders. Supply integration includes Just In Time(JIT) delivery (frequent, small lots with a reduction of buffer inventories) reduction of the supplier base, evaluating supplier based on quality, delivery and performance, establishing long term contract with suppliers and the elimination of paperwork.

According to expert of Supply Chain Management- Dr. Hauhee and his co-author Mr. Corey Billington define SCM as the integration activities taking place among a network of facilities that procure raw material, transform them into intermediate goods and final products and deliver product to customers through a distribution system.

In the early days of Logistics (the producer to Supply Chain Management),the focus was more on satisfying the need of the supplier for efficiency (in particular manufacturing and distribution efficiencies) than satisfaction of the customer need for delivering service.

The LM council defines “SCM as the systematic strategic coordination and the tactics across the business functions within a company and across business with the supply chain activities for improving the longterm performance of the individual or the supply chain as a whole”.

THE FOLLOWING ARE THE VARIOUS COMPONENTS OF SUPPLY CHAIN**A) In-Bound Logistics****This includes**

- a) Suppliers and sub-suppliers of various raw material and subassemblies.
- b) Suppliers of other inputs like power, fuel etc.
- c) Transportation
- d) In bound warehousing of raw material, packaging material and sub assemblies.
- e) In house store of raw material, packaging materials and sub assemblies.

B) In processes Logistics**This includes**

- a) Sequencing and positioning of work station
- b) Movement of material.
- c) Deployment of work force at desired stations.
- d) Managing the cash for beneficial purchases.
- e) Managing the inventory of spares and tools.
- f) Movement of finished products.

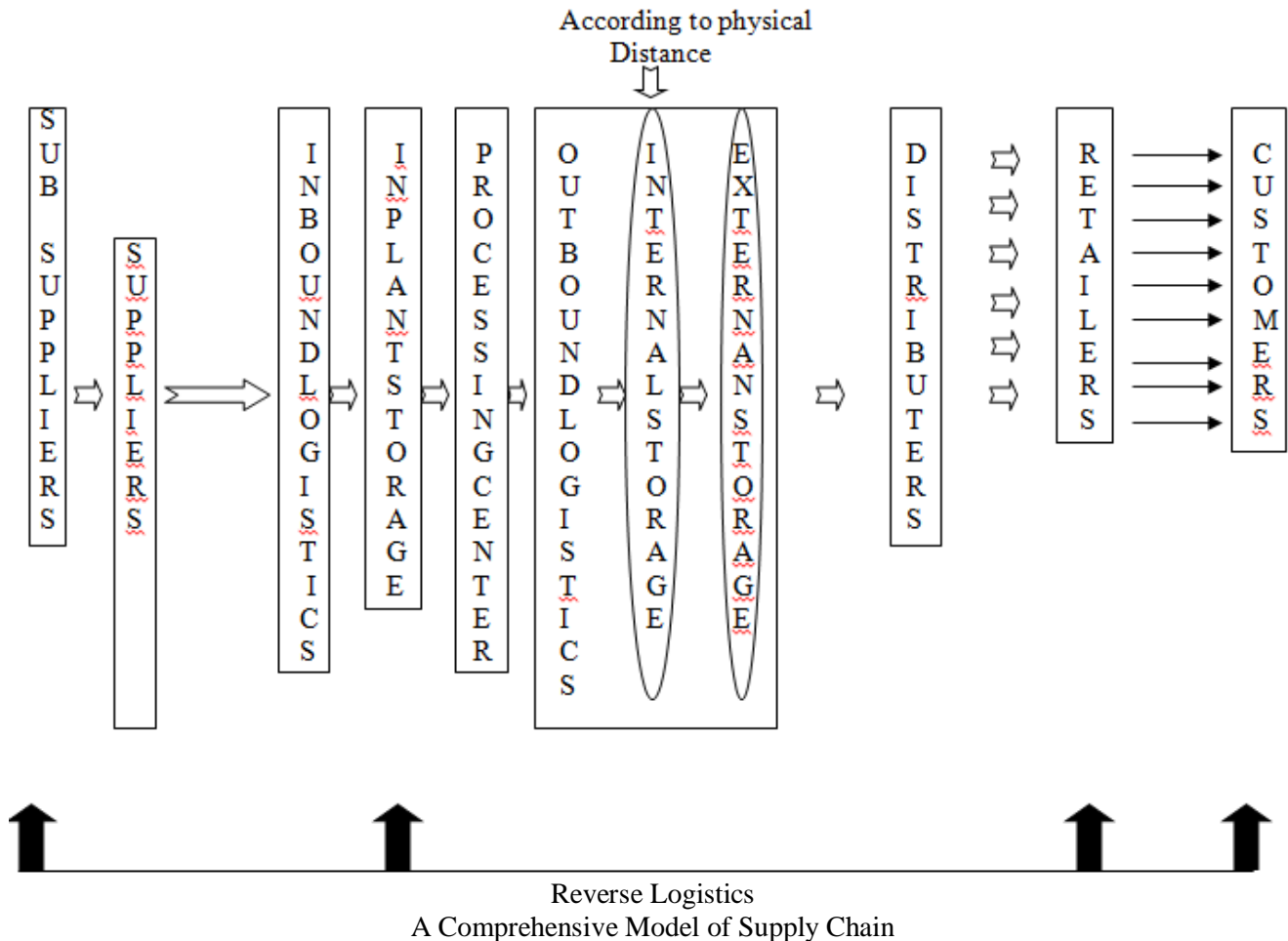
C) Out-Bound Logistics**This includes**

- a) Storage of finished product.
- b) Transportation of finished product from manufacturing site to out bound stores/ Distributors/Dealers/Retailers as applicable

c) Distributors/Dealers/Retailers network.

d) Attending rejections/complaints.

A COMPREHENSIVE MODEL OF SUPPLY CHAIN HAS BEEN DEVELOPED (BASED ON VARIOUS COMPONENTS OF SUPPLY CHAIN)



The following are the basic techniques of Digitization use for SCM in Entrepreneurial growth

- 1. Planning:** - Planning is the basic and main part of Entrepreneurship. The Enterprise needs a strategy for managing the entire resources that requires to be transformed to meet out customer demand for the product and services. A conscious and regular approach towards planning is developing as a set of metrics shifted business towards E-commerce, so that it is cost effective, efficient and delivers high value and quality to the customers.
- 2. Sourcing:** - Sourcing management refers to various activities related to a firm's total purchasing in a broader scope. The focus of sourcing management involves integrating supplier capabilities into organizational processes to achieve a competitive advantage through cost reduction, technology development, quality improvement, cycle time, and delivery capabilities to meet customer requirements. Some people consider sourcing as a part of inbound logistics. Sourcing of suppliers and selecting the best that will deliver the raw materials and sub-assemblies: the enterprise need to work faster with the help of artificial intelligence, machine learning, the Internet of Things (IoT), and blockchain reshape entire industries. Actually these advances are enabling procurement leaders to look beyond their traditional purview into smarter at drawing insights from sprawling troves of seemingly unrelated data to create the product is an important task.
- 3. Manufacturing:** - It is known as transforming step, where raw materials and sub assemblies are transformed or converted into deliverable goods and services. In this digitization step it is to prepare the time schedule of the activities necessary for production process such as cleaning, drying, grading, treating, testing, packaging and dispatching driven by smart technology. Connectivity of data systems and improved analytics in the supply chain management are providing assurance of necessary inputs at designated work place in right quantity, at right time through Digital Transformation and optimization in the manufacturing landscape. Major Trends of Digitization in Manufacturing Industries are:-

a. IoT And Industry 4.0

IoT (Internet on Things) can provide accurate feedback to the companies for awaking defects or damaged goods. The incorporation of IoT, Industry 4.0“represents the vision of the interconnected factory where the tools, methods & equipment is online, and in some way is also intelligent and capable of making its own decisions.” The use of implementing IoT is to reduce cost, waste and fully transparent. The digitalization provides huge advantages in customer service, flexibility, efficiency, integrated planning and execution, logistics visibility, Procurement 4.0, smart warehousing, efficient spare parts management, autonomous and B2C logistics, prescriptive supply chain analytics, and digital supply chain enablers.

b. Artificial Intelligence And Machine Learning

IBM is a greatest chess player in the world since decade. Now a days through Artificial Intelligence manufacturing industries are transforming the ways of producing goods and services. Advanced algorithm have replaced human hands, resulting in less wasted time and materials, as well as optimal accuracy and workflow which is helpful in maintaining relationship between man and machine. Digitizing the manufacturing industry means lower cost of production, turnarounds, and quickly or efficiently meeting customer demands with integrated IT systems. It also focus to provide the relevant data to both sides (Supplier as well as Customer) of the supply chain more easily, increasing production capacity by 20% through which Quality is no longer sacrificed for efficiency

c. Robots

Traditionally, robots were used to perform tedious, repetitive tasks on the assembly line. But now a days, robots are using for replacement of human activities. Robots providing secure and safer working environments for humans through which the can be reduces the dangerous or unsuitable situations. Robots are highly trained and collaborative to increase the work efficiency and reducing the errors & delays in work which makes them more useful in industries like manufacturing.

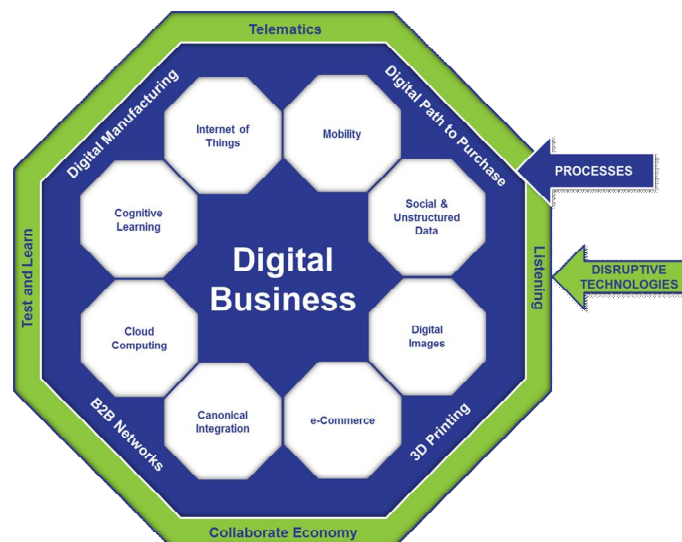
d. Improved Speed And Efficiency of Robots

With the help of Robots and other automated technology are playing as an integral part of Manufacturing Industries through which improving high speed of functioning and efficiency of work, allowing companies to minimize the waste & cost and optimum utilization of production workflows, inventory, WIP, and value chain decisions. Today's cloud computing grows more stable, manufacturers are beginning to implement its software with more confidence through this new level of predictive accuracy comes an improvement in condition monitoring processes, providing manufacturers “with the scale to manage Overall Equipment Effectiveness (OEE) at the plant level increasing OEE performance from 65% to 85%”b improving speed and efficiency into lower cost & better quality control.

e. Data and analytics

It is very difficult to analyses the big data as it also consume more time, but digitization helps to manage this struggle to a manufacturer. It also helps in storing, managing, and processing the customer data on time to many businesses to analyses this data in managing the supply, delivery & customer support. In this digital world, it is predicted that by 2020, there will be 50 times the digital content to what exists today.

- 4. Distributing:** - This is an important part related to outbound logistics. We call this activity as “Support products” in this the computer time required to prepare shipping documents, coordinate the receipt of orders from customers/distributors/dealers, develop a network of warehouses, select carriers and other means to deliver the products to customers and setup an invoicing system to collect from customers also included in this activity. Rising of E-Commerce companies like –Flipkart, Amazon, Mintra etc.is now capturing the whole distribution hub and increases the virtual online shops. The process of delivering goods from the place of manufacturing to place of destination using the optimize the stock through digitalization.
- 5. Customer's Support and Complaints:** - To attend customer complain and grievances is the main part of supply chain related to its problem part. For this a transparent policy and customer care department need to be developed for creating a network for receiving defective products back from the customers and substitute it with the new once or rectify the defects. It will help in getting customers confidence and build and maintain a good relationship with customers. Digitalize helps to customer expects goods at their doors as per their choices. The IoT provide the opportunity to the customer to place an order from anywhere in the world from smart devices which increases customer expectations.



The Model of Digital activities in the Supply chain for Entrepreneurial growth

THE ENTREPRENEURSHIP

India is the world's twelfth largest economy at market exchange rates, fourth largest in purchasing power and has the third largest GDP in Asia. The economic reforms post 1991 have further transformed it into the second fastest growing large economy, and has paved the way for a huge number of people to become entrepreneurs. The general meaning of the entrepreneur is a person who willingly wants to accept responsibility and who involves in the same form of the business activities. The definition of entrepreneur has been changes time to time as per the perception of the person in contest of their involvement. The economists, sociologist, physiologists, and management experts define entrepreneur in their own words and ways.

The word Entrepreneur is a French word and literally translated to undertake. The New Encyclopedia Britannica considers an entrepreneur as an individual who bears risk of operating a business in the face of uncertainty about the future conditions.

The Dictionary meaning of entrepreneur is a person, who reorganizes and manages enterprise involving risk. This meaning of entrepreneur is quite near to the overall personality of the entrepreneur, but it is not complete in the respect of the intellectual capability of the entrepreneur to minimize risk and foresee avail the opportunities.

- ✓ The sociologists define entrepreneur as one, whose action reflects his social status and he contribute to the development of society.
- ✓ The economists define an entrepreneur who brings resources like fund, raw material, machines, labour and other assets and combine it to made value addition and obtain profit. He also introduces changes and innovation for the betterment of the enterprise.
- ✓ The psychologists define the entrepreneur as a person, who is typically driven by some foresees, which create a desire to attain/obtain something.
- ✓ The management experts define entrepreneur as a person, who has a vision and formulate action plan to convert in to reality so as to achieve the dream.

Since many characteristics like creativity, risk taking an innovations have been associated with term entrepreneur, one can consider entrepreneur as only those individuals who take up the challenges to establish a new enterprise with new concepts and ideas and new ideas emerge only through imaginative thinking, creativity is the [process through with the current knowledge is rendered obsolete by creating something new. But this is not true in totality. The economists and research scientist like Debono have pointed out that value addition is an important variable to be associated with entrepreneur.

VIEWS OF SOME SCIENTISTS ON ENTREPRENEUR

Richard Cantillon (1667-1755)

He stated that an entrepreneur is a risk taker because entrepreneur "buy at a certain price and sell at an uncertain price, therefore operating at a risk". He viewed that farmer is an entrepreneur, who promises to pay to the land owner for his a fixed piece of land, a fixed sum without the assurance of profit after the output from the farming.

Jean Baptist Say (1800)

According to Baptist, an entrepreneur is one who combines the land of one, the labour of another and the capital of yet another and thus produces a product. By selling the product in the market he pays interest on capital, rent on land and wages to laborers and what remain is his profit.

Frances Walker (1876)

Walker defines; a true entrepreneur is one who is endowed with more than average capacities in the task of organizing and coordinating the various other factors of production.

Frank knight (1921)

He viewed entrepreneur as the bearer of risk and uncertainty and the recipient of pure profit.

Joseph A Schumpeter (1883-1950)

According to Joseph, the entrepreneur is someone who carries out 'new combinations' by such things as introducing new products and processes, identifying new export markets or source of supply, or creating new type of organizations

Mark Casson (1982)

According to Mark, an entrepreneur as "someone who specializes in making judgmental decision about the coordination of the scarce resources".

Gartner (1990)

According to him, the entrepreneur, innovation, organization creation, creating value, profit or non-profit, growth, uniqueness and owner manager.

Peter Drucker

He defines an entrepreneur as one, who always searches for change, responds to it and exploits as an opportunity. Innovation is a specific tool of entrepreneurs, this means by which they exploit changes as an opportunity for a different business or different services.

THE ESSENCE OF ENTREPRENEURIAL THEORIES

After analysis of various thoughts and views, it may be concluded that profitability is an important consideration for sustainability and growth of the enterprise, whereas effective Supply chain management can turn-around the prospect through digitization of the enterprise.

CONCLUSION

In this study it has been observed that economic theory of entrepreneurship is dominant for the survival and growth of the enterprise. The effective growing trend towards Supply chain management will lead the reduction in cost up to 60-70% of product and services, thereby increasing the profit for further expansion or distributing to the shareholders as the E-commerce is focused on getting the right product or service to the right supplier, from right place, at the right time in the right quality, in the right condition or quantity, at the right price, at the right person. Digitization helps to the Entrepreneurs to face the challenges with potential SCM Strategic tools and digital methods. The innovation in technologies helps to grow the entrepreneurs in the competitive world. He also mobilizes various resources in the field of knowledge, financial, innovations, relationships and employment etc. He focuses toward transforming the traditional concepts into digital concepts.

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IMPACT OF DIGITAL MARKETING ON CHANGING SCENARIO OF BUSINESS

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ABSTRACT

Digital selling is that the avenue of transmission that is employed by the marketers to endorse the products and also the services towards the marketplace. The supreme purpose of the digital selling cares with shoppers and permits the shoppers to mix with the merchandise by virtue of digital media. This editorial concentrates on the magnitude of digital promotion for each customer and marketers. We have a tendency to scrutinize the results of digital selling at the bottom of the firm's sales. One hundred respondents opinion is collected to urge a clear image regarding this study.

Keywords: Digital marketing, promoting, traditional marketing

INTRODUCTION

Digital marketing is differentiating from traditional marketing. Marketing has grown up in quality over time, significantly in bound countries. Within the USA on-line promoting remains prevailing, in Italian Republic is referred as net promoting however within the UK and worldwide, digital promoting has become the foremost common term, particularly once the year 2013.

Digital marketing is an important term for the marketing of products or services using digital methods, mainly on the internet, but also including mobile phones, display advertising and any other digital technology.

The way in which digital selling has developed since the 1990s and 2000s has changed the way brands and business utilize technology for their marketing. Digital marketing campaigns are becoming more prevalent as well as efficient, as digital platform are increasingly incorporated to marketing plans and everyday life, and as people use digital devices instead of going to physical shops.

REVIEW OF LITERATURE

Digital marketing is used as a medium for the distribution of promotional message, is fast becoming an advertising tool.

(Alba et al., 1997). Say that online searching has additional dangerous operation once shopper obtain product from online website and conjointly corporations developing trust by online searching is sophisticated than in traditional retailers. (Rowley, 2001) indicates appropriate email content plays a key role in advertising effectiveness. (Yoon 2001) indicates that one of the important segments of the digital marketing involves power of email marketing/advertising. (Gartner, 2002) indicates that consumer are interested in digital marketing.

(Kozinet, 2002). The unique aspect of social media marketing and its immense have revolutionized marketing practices such as advertising and promotion.

(Bitting and Ghorbani, 2004). Therefore, Companies need to provide proper information and create trust for the consumer that the page is originated by the company and the transactions will be done much ease.

(Kucuk and Krishnamurthy, 2007) Social media promoting could be half of the digital media promoting that will conjointly be outlined as the marketing of products and services. As we are able to see within the recent years, the recognition of social networking sites and social media has exaggerated at an international level.

(Kaplan and Haenlein, 2010) state that, there are several blessings of mistreatment social media selling, it helps to attach business to customers, develop relationships, and foster those relationships during a timely manner and at a low value. Social media websites provide the associate chance to the organizations to attach and interface with potential and current customers, that can facilitate to have a robust client relationship and additionally to build all-important significant relationships with customers.

OBJECTIVES

- To recognize the usefulness of digital marketing in the competitive economy
- To study the effect of digital marketing on consumer purchase habits.

METHODOLOGY

Primary Data: primary data is collected through questionnaire and observation method.

Secondary data: secondary data is collected through journals, magazines, and websites.

Sample size: The sample size is opinion of 100 respondents who presently purchasing through online modes.

Difference between traditional marketing and digital marketing

Table - 1: Difference between digital marketing and traditional marketing

Traditional Marketing	Digital Marketing
Communication is unidirectional. Means, a business communicates about its products or services with a bunch of people.	Communication in this type of marketing is bidirectional. The consumer asks queries or gives feedback about the business products and services.
Communication medium is generally personal, phone calls, letters, and Emails	Communication medium is mainly through social media websites, chat, and Email.
Campaigning of products takes more time for designing, preparing, and launching.	It is a fast way to develop an online campaign and carry out changes along its development. With digital tools, campaigning is easier.
It is carried out for a specific audience throughout from generating campaign ideas up to selling a product or a service	The whole content is available for general public. It is then made to reach the specific audience by employing search engine techniques.
It is traditional way of marketing; best for local audience	It is a best way for reaching global audience.
It is quite difficult to measure the effectiveness of a campaign in this marketing.	It is quite easier to measure the effectiveness of a campaign through analytics.

ADVANTAGES OF DIGITAL MARKETING

- The main advantage of digital marketing is that a targeted audience can be reached in a cost effective manner.
- Digital marketing benefits business of all size by giving access to the mass market at an affordable price.
- It's a fact that higher conversion rates can be generated by effective digital marketing techniques.
- Consumer today is looking for a more custom and personalize customer journey that simply is not possible with traditional marketing.
- Digital marketing helps in reaching large number of audiences.
- Digital marketing is an easy process for converting a customer.
- Digital marketing products com in scalable sizes so that small, medium and large businesses can all utilize these products to reach their audiences.

Table - 2: profile of the online buyer

	Category	Number of Respondents	Percentage of Respondents
Gender	Male	75	75%
	Female	25	25%
	Total	100	100%
Age	Below 18 Years	16	16%
	19-30 years	24	24%
	31-45 years	34	34%
	Above 45 years	26	26%
	Total	100	100%
Profession	House Wife	12	12%
	Employee	49	49%
	Business	24	24%
	Students	7	7%

Monthly Family Income (in Rs.)	Any other	8	8%
	Total	100	100%
	Below 10000	22	22%
	10001-20000	48	48%
	20001-40000	25	25%
	Above 40000	5	5%
	Total	100	100%

Table -3: Awareness of customer about online shopping

Particulars	Number of Respondents	Percentage of Respondents
Excellent	55	55%
Good	27	27%
Average	11	11%
Poor	7	7%
Total	100	100%

Table -4: Availability of information about online products

Particulars	Number of Respondents	Percentage of Respondents
Having knowledge about online shopping	75	75%
Not having knowledge about online shopping	25	25%
Total	100	100%

Table -5: Reasons for choosing online shopping by the customer

Particulars	Number of Respondents	Percentage of Respondents
Wide variety of Products	23	23%
Easy buying Procedures	38	38%
Lower Prices	19	19%
Various Modes of Payments	14	14%
Others	6	6%
Total	100	100%

Table -6: Frequency of online purchasing by the customers

Particulars	Number of Respondents	Percentage of Respondents
Purchase once Annually	12	12%
2 - 5 Purchases Annually	46	46%
6-10 Purchases Annually	26	26%
11 Purchases and above Annually	16	16%
Total	100	100%

FINDINGS

- Digital marketing have a shiny future in the present market.
- Customers are quite satisfied through purchasing digital marketing.
- People find it safe while doing online purchase.
- Ratio of male customers in online shopping is 75%.
- Awareness about online shopping is 75% among the respondents.
- Income group of respondents mainly falls in the range of Rs. 10,001 to Rs. 20,000 that is 48%.

- Most of the respondents that is 38% feels that online shopping is simple; others feel that they can have a broad variety of products, products with lower price, a variety mode of payments etc.
- 55% of respondents feel that availability of online information about Products & Services are outstanding.
- 46% of the total respondents purchase the online products 2 to 5 times annually.

CONCLUSION

Digital selling has turn out to be important part of approach of many companies. At the present time, still for tiny business proprietor at hand have extremely inexpensive and competent methods by using digital marketing to market their products or services in the society. It has no restrictions. Company can utilize any devices such as tablets, TV, Mobile phones, laptop, social media and other methods to support company and its products and services Digital marketing may achieve something more if it considers consumer desires as a peak priority. The main advantage of digital marketing is that a **targeted** audience can be reached in a **COST effective** and **measurable** way. Other digital marketing advantages include increasing **brand loyalty** and driving **online sales**.

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IMPACT OF DIGITAL MONEY

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ABSTRACT

The various digital means of payment that are presently operative in Uruguay are planned to target. The general population and fussy segments of it to a different degree. They are therefore expected to have a different impact on the local and the global economy growth. Overall money flows may raise through the use of cards, particularly those that allow opposed payments along several time periods while almost all the instruments and policies described generate increases in the number of transactions within the proper economy. a lot of of them further ask for to get better social and economic situation of the poorest household by promoting their financial inclusion and promote the formalization of MSMEs. Given the high concentration of poor households within particular geographical areas and the creation of detailed retailer network linked to various mobile systems, they should also boost money flows at the local economy stage. It is main to be known with that thee mission of digital means of payment adds direct purchasing power to the market, mainly those are based on credit, and hence separately from increasing the overall level of economic activity they may also produce momentous inflationary pressures.

Keywords: digital systems; local development; money flows.

1. INTRODUCTION

The concept of 'digital money' encompasses all means of payment that only endure in electronic form - credit and debit cards as well as transfers and payments made by the Internet – online payments – or else by sending a message from a mobile phone – mobile money. The accelerated development of ICT tools has provided with added varieties of electronic instruments that can be used for an distended range of transactions (e.g., pre-paid cards; electronic vouchers), a process that has turned them into most common physical money substitutes around the world. The enhanced safety and comparatively lower transaction costs natural to digital money are a key reason explaining the increased demand observed at the household point.

On the other hand, their far and large acceptance among useful agents is also fostered by its superior operational and administrative effectiveness. Both effects would lead to increase in the money quickness and also in total money flows. Many of the new forms of digital money are supplied at a lot lower price than that of traditional financial products, a feature that renders them reachable for probable users that self-exclude themselves from the market due to budgetary limitations. This is mostly so for m-money in the case of individuals from households contained by the lowest income strata and of micro, small, and medium enterprises – MSMEs – given they would be entitled to get contact to the system simply by owning a mobile phone.

The low operational expenditure associated to mobile money systems are also at the core of the economic possibility of penetrating unattended markets, such as lonely and/or small communities as well as agents that be short of any collateral. The ease of operating the system and the following decrease in transaction outlay act in turn as attractors for other groups of interest, such as young individuals and a share of the mature (**Cassoni and Ramada-Sarasola, 2012** and references therein). Therefore, m-money is considered to outperform other substitute currencies as a vehicle to boost limited development and to permit for reducing on the whole poverty levels through the financial addition of vulnerable sub-populations.

According to Internet and Mobile Association of India (IAMAI) and Kantar IMRB report out of 918 million rural residents of India only 186 million are using internet and leaving out 732 million probable users. The ratio of male to female users is 64:36. No issue these digital changes have taken place about ten years ago but it is not capable to reduce dependency on paper currency in the economy. To trim down the burden of printing more currency and dependency on paper currency domen.

Apart from this in order to beat the habit of using digital currency government unveils two schemes namely Lucky Grahak Yojana for customers and Digi Dhan Vyapaar Yojanas for traders. The Indian government and Reserve Bank of India both are trying very very hard to promote mobile banking and electronic payments. Along with these efforts recently a range of small finance banks and payments banks have also been brought to complete the motto of financial enclosure and innovative banking solutions. While Digital India is trying its way in rural India but the digital literacy one of the biggest obstacle in making it a great success.

CASHLESS ECONOMY

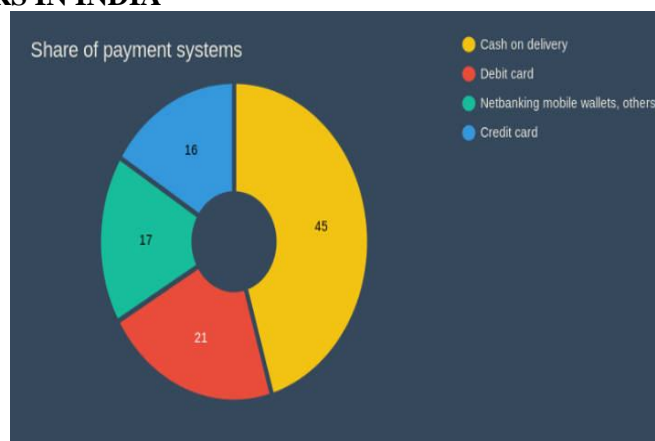


OBJECTIVES

The objectives of this study are

1. To analyse the crash of digital payment system in India
2. To understand the penalty of digital system.
3. To check the acceptance of technology by the people. Research Methodology In order to study the impact of digitalization secondary data from different research papers, reports & government data has been studied and analysed

DIGITAL MONEY USERS IN INDIA



DIGITAL MONEY INSTRUMENTS

Credit Cards

A credit card is a payment card issued to cardholders to enable the cardholder to pay a merchant for goods and services based on the cardholder's promise to the card issuer to pay them for the amounts plus the other agreed charges. The card issuer (usually a bank) creates a revolving account and grants a line of credit to the cardholder, from which the cardholder can borrow money for payment to a merchant or as a cash advance. In other words, credit cards combine payment services with extensions of credit. Complex fee structures in the credit card industry may limit customers' ability to comparison shop, helping to ensure that the industry is not price-competitive and helping to maximize industry profits. Due to concerns about this, many legislatures have regulated credit card fees.

Debit Cards

In India there is a more extensive use of credit than debit cards, at least among the banked sub- population. Where credit cards offer extra space for spending, and have traditionally been seen as a status symbol, debit cards offer only a technological difference for existing money. There is also a certain resistance for accepting debit cards from the side of retailers that is mostly related to the fact that they make purchases more noticeable

and thus more easily taxable. Although the same holds for credit cards, the underlying rationale seems to be that credit cards in most cases create a sale that otherwise would not have happened while the use of a debit card is only possible when the client does have the amount of money needed, in which case the shop might prefer to have it in cash. Debit cards started to be used two decades ago mainly as a means to withdraw cash and deposit cash and checks from ATM cash machines and hence without being forced to attend to bank branch.

Mobile Money

Mobile money systems involve the provision of and the access to banking products and Services by means of mobile telephones that are connected to effective and/or bank personal Accounts to which deposits are done through pre-existent banking and non-banking Agencies. In the case of virtual accounts the system works analogously to those that involve Pre-paid cards. SMS payments are one of the mobile banking products that are slowly picking up in Uruguay. The services are available for clients of at least one of the four mobile phone Companies.

Online Transfer- NEFT or RTGS

The third simplest methodology for the cashless dealing is on-line transfer facility NEFT or RTGS. So as to try to on-line cash transfer, you wish web banking facility. On-line transfer facility NEFT or RTGS is relatively quicker than cheque or DD. on-line transfer may be done from anyplace.

E-Wallets

E-wallet is next cashless payment option. E-wallet can be used to purchase products starting from grocery to airline tickets. In order to use E-wallets customer and merchant, both require a smart phone with active internet connection. The most popular example of E-wallet is PayPal. Apart from PayPal, you can also use Payoneer, Transfer wise, Skrill, and PayZa. After registering for E-wallet you need to link your credit card or debit card with your E-wallet id. You can use e-wallet for fund transfer or online shopping. It is the simplest cashless method.

UPI Apps

UPI is a mobile payment system which allows you to do various financial transactions on your smart phone. UPI allows you to send or receive money using effective payment address without entering bank information. Merchants can register with banks to accept payments using UPI. Like in the case of a PoS machine, the merchant would require a current account with a bank to accept UPI payments.

The examples of few UPI Apps are SBI Pay, ICICI Pocket, Axis Pay UPI App, Union Bank UPI App, PNB UPI, PhonePe, TranZapp etc.

Aadhaar Enabled Payment System

Aadhaar Enabled Payment System (AEPS) is one of the best cashless payment methods. AEPS is like Micro ATM it uses smart phone and a finger-print scanner for the transaction. In order to use this facility, it is mandatory to link your Aadhaar card to your bank account. You can use AEPS in order to perform transaction like Aadhaar to Aadhaar fund transfer, Cash withdrawal, Cash deposit etc.

NUMBER OF TRANSACTIONS THROUGH CREDIT & DEBIT CARDS IN INDIA



INDIA IS TAKING A STEP ON THE ROAD TO CASHLESS ECONOMY

The government has been working hard to promote digital payment systems. So far, it seems to be working: the government has reported a 400- 1,000% increase in digital transactions since the demonetization. The National Payments Corporation of India, together with the RBI, has launched UPI ("united payment interface"). The

“Digital India Initiative” has been set up to provide internet access and comprehensive mobile phone coverage across India, helping over a billion people to get online and utilize digital payment techniques. The RBI has been promoting a biometric authentication system for banking. The Aadhar Enabled Payment System (AEPS) can be used to open a Bank Account using just an identification number and fingerprint.

IMPACT OF DIGITAL MONEY

Taxation: with lesser availability of hard cash at homes and more in banks, there is lesser scope of hiding income and evasion of tax and when there are more tax payers it ultimately leads to a lesser rate of taxation for the whole country.

Transparency and accountability: it becomes quite easier to track the flow of money with every transaction recorded with the buyer, seller and regulatory bodies, making the system more transparent and amenable. In the long term it leads to better business and investment prospects for the economy as a whole. More currency in bank meant more circulation of money in the economy, leading to more liquidity and would mean lesser interest rates (according to the monetary policy of the country).

Reduced red tapism and bureaucracy: with cashless transactions through electronic means that the wire transfers are tracked and other people are responsible that successively reduces corruption and improves service time.

Less availability of cash for illegal activities: when folks are inspired to travel cashless, there's lesser money on the market with the folks and there won't be a way to take a position in alternative activities to use the idle money. Channels like banking industry (illegal remittance) can ultimately suffer the strength of a cashless economy.

Pack of cards: There is no need to carry bulky notes in a case. Carrying the required cards or mobile banking will suffice. More safety with a PIN protected card etc. which will work only with your own credentials.

No fear of being robbed unlike carrying cash and letting everyone know that there could be something worth snatching.

Tracking of expenses: it is easier to determine how much was spent where.

The amount can be paid in small denomination. In cash transactions, there is no need to pay fringe amount in case the exact amount is not available with either of the parties'. An important, though seemingly insignificant issue is that of hygiene of the notes.

Easy accounting consumer don't need to go every day to deposit cash to your current account.

Easier transactions:- We can do any transaction with security.

CONCLUSION

However, the benefits of this move have now started trickle in with more and more people switching to digital modes of receiving and making payment. India is steadily transitioning from a cash-centric to cashless economy. Digital transactions are traceable, therefore easily taxable, leaving no room for the circulation of black money. The whole country is undergoing the process of upgrading in money transactions, with e-payment services gaining sun paralleled momentum. A large number of businesses, even street vendors, are now accepting electronic ss, prompting the people to be trained to transact the cashless way at a faster velocity than ever before.

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DETERMINANTS OF DIGITAL FINANCIAL SERVICES: A REVIEW OF LITERATURE

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ABSTRACT

Digitalized world is the part of developing country. Nowadays, Information acts as a fuel for upgrading knowledge and brainpower. It encompasses the revolution of the value creation of the companies. We can get the descriptive research through this review paper. As this review paper provides insights regarding financial services through digital platform. Innovation has the key to work on effectiveness and efficiency. To sustain in the market, it is important to have an idea about how important and most preferred digitalized platform has become. Making a stand as the smart organization includes the need of virtual policy. Forthwith, upcoming business strategies include strategies of information technology as most of the population has become a "Tech-Savvy". Therefore, this has taken a cognitive approach for a long time for financial world to be digitalized. It would show how financial services are reaching globally to the people. It may affect the marketing opportunities for the start-up of new companies. Being digital financial services as the major remark of competition in the market, it can attract people to become a part as their customers. Major role of companies seeking opportunities are related to its interaction with their customers and thus increases the value in this competitive era. Successful organizations are observed for their digital services providing to their valuable customers. But technology cannot be the only prospective; rather it included all the PESTL features. These are political, economic, social, technological and legal prospective. Knowledge of how digital financial services are going to work is necessary for everyone to gain. We can get to know about how is it worth for future.

Keywords include: Finance, Digitalization, Globalization, financial literacy.

INTRODUCTION

Digitalisation is recognised as "Game-Changer" in terms of expansion of IT World. As this made services convenient and less expensive for payments and transfer funds when needed. It also led to literacy level for digital platform have shown good level of impact in terms of households mainly. Digital financial services (DFS) focus on reaching out to its customers as fast as it can; therefore banks are working its technology to provide better service to their customers. DFS can contribute to the Urban-Rural flow significantly. It can directly affect the economy at the high pace.

It has been seen that DFS has unlocked the potential for growth of financial services across the world through channels. Combination for digitalised services with Finance can be named as Financial Inclusion which revolves around affordability and useful applications to meet the needs like transactions, payments, savings, credit and insurance. It can reach up to the excluded or different kind of population.

Digital financial services (DFS) helps to deliver basic financial services to the poor people through effective and effective techno-knowledge like instruments needed for innovative technologies i.e. mobile-phones, electric money models and nowadays, platform for digital payment services. Objective of providing knowledge about financial services going digital to people is to get them known to the advantages of Digital Financial Services in upcoming future.

Nowadays, almost everyone prefers online payment rather than through cash in hand. Hence it has resulted to be the most important aspect of every customer friendly companies. Companies are working on its IT Department to open the gateway for online payments and other financial services. As application of DFS is increasing, competition is getting increased as well; henceforth it has its impact on supply of products and services and speedy development.

This review paper has a significance to understand the reason to develop digitalization in financial services and invest for saving money which is essential to reduce financial burden as per understanding and knowledge for those who are in need (basically, people who belong to poor population).

		Dimensions of Digital Financial Services		
Authors/Years	Paper Title	Dimensions	Research Methodology	Financial Services Concepts and Its Impacts
Joyce, Lisa and Rathakrishnan 2010	A study of digital financial awareness	Awareness about digital financial services is important to increase digital	Primary data was collected by survey method with sample size of 280 students.	The stream of business and financial studies has positive impacts on financial awareness level of youth. The digital

	among youths	financial literacy. The financial and basic awareness of youth is affected by their age, subjective knowledge, and family background, stream of study and sources of financial information.	Multivariate analysis of covariance was conducted for hypothesis testing	financial awareness includes awareness about risk factors, inflation, interest rates, financial products, time value of money etc. The awareness level helps the policy makers for making policies related to insurance, mutual funds and pension funds.
Ulun Akturan and Nuray Tezcan 2012	Mobile banking adoption of the youth market	Mobile banking is a part of digital banking that creates effective communication channel between consumer and banks. Adoption of mobile banking system is affected by youth market, mobile technologies, banking system, consumers attitude, perception of individuals towards technology adoption etc.	435 usable data of Non user's mobile banking university students were collected and analysed by using SEM to check the regression relation.	Perception and intension of individuals towards adoption of mobile banking system is required to establish efficient digital financial system. People attitude and their perceived risks are very essential determinants to adopt mobile banking system. In order to increase mobile adoption among people it is responsibility of Government and Management of banking system to create and increase financial literacy among people. A healthy and secured financial system needs to be established.
Cameron Peake 2012	New Frontiers: Launching Digital Financial Services in Rural Areas	Mobile network operator and digital financial services are widely provided.	Review of Innovative Digital Financial Services undertaken in rural areas	In rural areas bank related financial services are digitally provided with well documentation.
Peter S.H.Lee, flangab Peter C.Verhoefa Peter Dahlströmc TjarkFreundtc 2014	Challenges and solutions for marketing in a digital era	Internet usage covering Business-to-Business Marketing and other markets.	Convenient sampling method was used for survey among marketing executives around the world. Total 777 usable responses were collected and analysed using regression model	Digitalization has become an integral part of sources of market around the world including B2B and B2C market levels.
Rambalak Yadav, Vikas and Govind 2014	Intention to adopt internet banking in an emerging economy: a perspective of Indian youth	The important determinants of DFS are Individuals perceived usefulness, consumer's intention, consumers perceived risk; Individuals planned behaviour, sense of security and security of income.	210 usable questionnaires were collected by using self-structure survey method. Structural equation modelling approach was used for data analysis.	In order to capture rapid technological change in banking sector, adoption of digital financial and banking services among individuals is important. Knowledge about information technology and financial knowledge have positive impacts on adoption of digital financial system.
Mark Dodgson, David Gann, Irving Wladawsky-Berger, Naveed Sultan and Gerard George 2015	Managing Digital Money	Globalised trade and Digital Money	Review and theory of digital money and globalized trade	Money can be used in commercial trade of goods and services with a Digital Platform and getting Globalised with urban population.
Dean Karlan Jake Kendall Rebecca Mann Rohini Pande	Research and Impacts of Digital Financial	Impacts of Digital Financial Services on productivity of people in every field	Collection and compilation of literature on works done in the area of	As Financial Services is growing at the upscale towards developed country, its creating innovations and having positive

Tavneet Suri Jonathan Zinman 2016	Services		financial inclusion and innovative financial services introduced in the market	impact.
Michael D. Bordo, Andrew T. Levin 2017	Central Bank Digital Currency and the Future of Monetary Policy	Building up of economy and resulting to developments.	Working paper on importance of central banks digital currency on the transformation of economy	Digital Currency can facilitate its economic and its financial transactions with development in policies.
Margaret S. Sherraden 2017	Financial Capability	Capability of Financial basis for people staying at rural areas.	Structure survey method was used to check the financial capability of rural people	It creates an opportunity for people who do not know about financial households and its management.
Christian Königsheim Moritz Luka Markus Nöth 2017	Financial Knowledge, Risk Preferences, and the Demand for Digital Financial Services	Knowledge related to financial decisions for savings and innovations.	Survey method to check the financial knowledge and risk tolerance was used among 1700 consumers of German retail bank. Analysis was done using mean and standard deviation method and correlation was shown through graphical representation.	Financial Knowledge mentions information about stocks, risks and decisions related to households like retirement savings.
Tariq Abbasi and Hans Weigand 2017	The Impact of Digital Financial Services on Firm's Performance: a Literature Review	Mobile banking, Branchless banking, Electronic banking, Digital banking, Internet banking are important dimensions of digital financial services	An extensive literature review of 39 works was done to check the impact of DFS on firm's financial performance.	Digital financial services are positively associated with Firms performance, Firms Cost effectiveness, Banks performance, Firms efficiency and Firms profitability
Asli Demirgüç-Kunt, Leora Klapper, Dorothe Singer, Saniya Ansar and Jake Hess 2018	Opportunities for Expanding Financial Inclusion Through Digital Technology	Effect of Digitalization on payments and its security.	Compilation of digital library to make people technology savvy	Digital Technology in terms of Finance evolved the speed of payments and hence expansion of financial services all over the world (urban and rural areas).
Mohammed Farzana Begum 2018	An Overview of Digital Financial Services in India: Concept, Initiatives and Advantages	Impact of Digital financial services over rural areas and developing areas in India.	An article on importance of DFS for financial inclusion to make financial system more healthy and sound.	It showcases the convenience and secured banking services for people belonging to developing cities.
Dr.Nageswara Rao DARA 2018	The Global Digital Financial Services: A critical review to	Digital financial services are important tool to increase digital financial inclusion as it increases digital financial literacy.	Extensive literature review on global digital financial services	Mobile Payments are important tool of Digital Financial Services which creates healthy interconnection between people of economy.

	achieve for digital economy in emerging markets			
Niharika Srivastava 2019	Digital Financial Services: Challenges and Prospects for Liberalized and Globalized Indian Economy	Digital financial services leading to cashless economy.	Digital financial services a step towards developing cash less economy: A view on challenges faced by economy	Innovation in ways of payment digitally is having tremendous growth in the landscape of India.
Miao Zhang, Juanjuan Yang 2019	Research Financial Technology and Inclusive Finance Development	Technology of financial services enhancing innovation.	An analytical paper on financial technology for inclusive growth	Digital Platform helps the key to promote technological innovation, operational effectiveness with low cost.

CONCLUSION

Digital Financial Services integrates the gap between developed countries and developing countries. It corporates with the speedy technology and makes work, payments, investments and household related work quite easier. It also breaks down the unavailability of financial resources and information for whose people living in rural areas. DFS provided interaction on a large scale with individuals and groups. This results into entering the virtual world where it starts from Purchasing Goods and Services online and Payment processes digitally to becoming one of the cashless economies soon. This indication can make everyone capable for the application of financial services in the form of digital form. Education related to services in relation with finance is the most needed currently; As Future of world is globalized under Digitalization.

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SMART DIGITAL NATION, GENERATION & EDUCATION

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ABSTRACT

The development of new technologies help learners to learn more effectively, efficiently, flexibly and more comfortably. It helps smart devices to access digital resources through wireless network. Smart education describes learning in digital age, and gained attention. A four-tier framework of smart pedagogies and ten key features of smart learning environments are proposed for faster smart learners who needs smart knowledge and skills of the 21st century learning. The smart pedagogy framework includes class-based differentiated instruction, group-based collaborative learning, individual-based personalized learning and mass-based learning.

A technological build smart education and nation, emphasizes the role of smart learning computing, is proposed.

Keywords: Smart education, personalized learning, digital resources, Smart learners, Smart learning environments, Smart pedagogy & smart computing

INTRODUCTION

Food traceability, and autonomous municipal regulations. Nations around the world are gradually more aware of the importance of digitalization. Many countries are embracing a vision to build a Digital Nation with improved economic changes, robust social safety nets, and well-organized and fair governance. The success of Digital Nation initiatives depends on having an open environment, especially the application of borderless technology, which means applying universal borderless technology, and promoting the appropriate integration of international and domestic countries. Digitalization help to increase economic efficiency in all industries, through the creation of new business models and help for developing the nation. In the finance, traditional enterprises apply new digital technologies to enhance their competitive advantages. In the social sphere, digitalization optimizes resource allocation and improves lives. Globally, intelligent health risk prevention, public medical resources sharing, facilitation of professional training, and combined operation of medical facilities will solve key pain points in the healthcare field. Other applications such as remote education, modified content, and effective classrooms have gradually matured, and are alleviating difficulties previously faced in education.

In respect to governance, digitalization can improve government efficiency and urban administration. Digitalization will help in the realization of interactive policy channels, self-service transactions, included data management, and reliable information encryption in order to improve government services. Digitalization will also boost the formation of a new-era urban management system with self-adaptive environmental protection, independent urgent situation response, self-verifiable

OBJECTIVE OF THE STUDY

1. To understand the difficulties in the path of digitalization and the economic growth.
2. To understand how every step has been taken towards digital education is affected by a variety of factors and how they are interrelated and interdependent.
3. To understand the requirement of digital education.
4. The findings of the study will recognize the role of digital education and how these policies can be executed in the Indian economy.

REVIEW OF LITRATURE**The evolution of smart learning**

Jinal Jani and Girish Tere (2015). Digital India programme introduced by government of India is important for the development of digital education in the country. Digital India drive is a project initiated by Government of India for creation of digital empowered society across the country. It will help in mobilizing the capability of information technology across government departments and helps in delivering the different governments programs and services. Digital India will help in creating job, providing high speed internet and digital locker system and so forth. Digital India has three important components namely digital infrastructures creation, digital delivering services and resources and digital education

Himakshi Goswami (2016). The study highlighted the different opportunities and challenges of digital India programme in India. Digital India programme introduced by government of India will help in transforming country into a digitally empowered economy. This will help government of India to integrate the Government Departments with the people of India. The main purpose of this programme is to reduce the paper work and help in providing different Government services electronically to citizens. It describes the different opportunities of the programme for the people of the country. India is having different languages, culture, and customs, food habits, laws and traditions. The purpose of digital India programme is to integrate whole country digitally but languages would be the main challenges in the implementation of such programme.

Jayesh M. Patel (2017). There are many web based tools which can be used in the classroom for digital education like twitter, Glogster, Prezi, Diigo, Dropbox, and Moodle. Teachers and students are interested in web based digital learning but because of lack of knowledge they are not initiating the same. Web based tools will make the learning interesting and students will get motivated which normal classroom cannot do. Currently the teacher centric approaches are making learning boring even for interesting chapters, use of digital technology makes even boring content interesting and joyful. The concept of child centred approach will be fulfilled only with the help of digital technology

RESEARCH METHODOLOGY

The main focus of Qualitative research methods is providing a complete picture of the situation with the aim of understanding of behaviour and inter-relations. The study is primarily based upon the secondary data. The research for this paper was conducted through literature review, without any empirical work being conducted. A large resource of written material was used, which included books magazine articles, academic journals, as well as the websites.

SCOPE OF DIGITAL EDUCATION IN INDIA

Globally India holds an important place in the field of education. There are more than 1.39 million schools all over the country having over 228 million students enrolled across different fields and more than 35,900 higher education institutes. India has become the second largest market for digital education after the US. However, there is still a lot of scope for further development in the field of digital education. There are some major investment and developments that have been taken place to promote the digital education in India.

Some of these are NIIT, which is pioneer in Training and skills development, is planning to offer online courses from leading international universities to about 4.9 lakh people over the next three years with US-based edX. A digital education start-up, Byju's, has raised US\$ 51 million from the Chan

- Zuckerberg Initiative founded by Facebook founder Mark Zuckerberg for the development of digital education in India. Online and classroom-based certification courses offered by Neev Knowledge
- Management Pvt. Ltd under the brand name EduPristine has raised US\$ 10 million from Kaizen Management Advisors and DeVry Inc for the development of digital education in 15 cities across the country. Intel Corporation, a US based multinational technology firm is planning to provide
- Optimised learning solutions and extended computing technologies to students and schools across the country. In the field of information technology, the Cisco Systems plans to invest US\$ 100
- million in India over the next 2 years for the development of digital education which will include opening of six new innovation labs, which will help to train around 250,000 students by 2020. Tata Trusts which is the part of the Tata Group and Khan Academy are starting webbased
- Free learning portal to provide free digital education in India. Ignis Careers and SEED, Hyderabad-based education start-ups are working to provide
- Low-cost school education with the help of digital technology.

ADVANTAGES OF DIGITAL LERANING

Digital Learning has become very trendy in recent time. The following are the advantages of Digital Learning:

1. No Physical Boundaries

There are no physical boundaries in Digital Learning and has no vocational time restrictions. In case of face-to-face learning, the location limits the group of learners to those who have the ability to participate in the area. But this is not the case in digital learning. In digital leaning, there is no physical restriction and the learner can also attend the sessions anytime, anywhere according to his/her comfort.

2 More Engagement

Digital learning is a more attractive experience as compared to traditional learning. Through digital learning, a course can be designed in a way that makes it interactive and fun through the use of multimedia.

3. Cost Effective

Digital learning is cost effective way of education as compared to traditional learning. This is directed towards both learners and teachers. In digital learning, here is a good chance that you don't have to pay excessive amounts of money to acquire textbooks for school or college. As textbooks often become outdated after a certain period of time, electronic learning is definitely a cost effective way of learning because of the reduced cost.

4 Comfort Zone

Comfort zone can be established in digital learning as you can study at the time that suits you. In case of traditional learning where all the students have to present in the class when the teacher is teaching. The same is not the case which digital education. In digital education, the student can study at the time when he wants to study and of his own comfort.

The Digital Transformation of learning

- 1) Educator- student peers
- 2) Passive planned- active, on-demand
- 3) Lecturer –coach+ community
- 4) Fixed to class – open, adaptive
- 5) Course- concept + skills
- 6) Testing- applied usage, peer evaluation
- 7) Classroom - anywhere

CHALLENGES OF DIGITAL EDUCATION**Some of the major challenges for digital education in India are**

Resource and internet connectivity related challenges: - One of the main challenges for digital education in India is poor internet connectivity in rural areas and some part of urban areas. Majority of population across India has still no contact to internet and a large population in rural areas is still not so much educated in the field of digital technology. More Innovations necessary make the digital education more interactive and healthy.

Shortage of trained teachers:- A major drawback in the use of digital education in rural area is the lack of knowledge and skills. There is shortage of teachers, formally trained on digital technology. In some of the academic institution in rural areas, school teacher and college professors are not interested in using digital tools for conducting classes. They feels that a lot of information is explained to the students at one go through the digital medium and they prefer traditional teaching methods of marker and whiteboard. In rural areas, primary teachers and senior teachers are unenthusiastic to get trained and adopt digital technologies for digital education in school because they are in view that these troublesome technologies are out to replace them permanently.

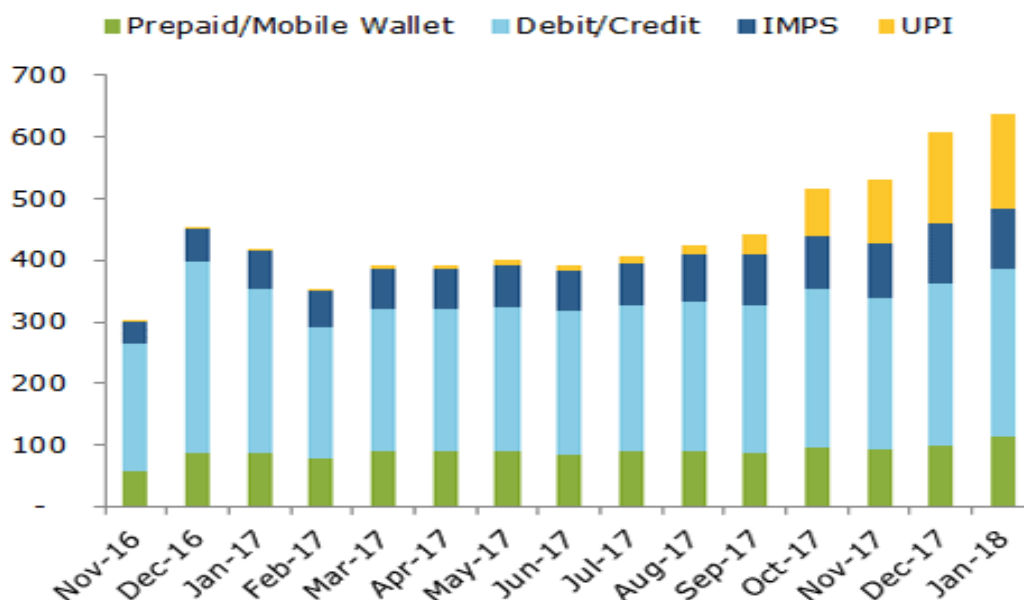
Language and content related Challenge:-Languages is one of the main obstacles for the development of digital education in India, there are more than 1000 different languages in different state have been spoken all over the country, pushing all the digital content in all these regional languages some time becomes difficult for the agencies.

Poor maintenance and up gradation of digital equipment: - In rural areas maintenance and up gradation of digital equipment is one of the major challenges. This is largely due to budgetary constraint by government. The digital education projects in rural schools are not self-sustainable. At early stage various projects have been launched by government for the development of digital education, but later on, they have not been taken due care for the maintenance of digital equipment which is affecting the digital education development in rural areas.

Insufficient funds:-Digital education involves effective and efficient usage of suitable and most recent hardware and software technology available in the market. In developing countries like India, digital technology implementation into education systems is a very difficult task as it requires huge funds and infrastructure to establish digital education. Through Digital India programme, the government has promised availability of funds for technology execution but lack or deficiency of finances leads to redundant and outdated infrastructure and equipment's in rural schools.

Digitalization and GDP Growth

Impact of digitalization on a country can be judged on the basis of its impact on the government, on the economy and the society. We have seen a major change in every sector with the appearance of digitalization. The digitalization has created new job opportunities, have led to innovation in very sector and also led to the growth of the economy i.e. have helped in the GDP growth of the country. The government has emphasised on the digitalization as it brings simplicity, transparency, better control and improved job opportunities, it also provides an effortless access to the people and an upward movement in their quality of life.



CONCLUSION

The digitalization brings modernism, simplicity of working, new job opportunities, improvement and growth in the economy. It helps to bring transparency in the system and more clear flow of funds in the economy and less is the problem of tax evasion, parallel economy etc. But with all these benefits available it is essential for the people to have basic monetary knowledge to push towards the importance of the digital knowledge. With the help of which they can protect their money in situations like inflation, depression, and know about different financial products and services to save it for their better future. Digitalisation can also play an important role in achievement this goal as it can have a greater reach to the people. By this we can reach on a conclusion that the new technology needs to be harnessed well and for this it is not only the availability, easy to use but also the knowledge to use it and get better results from it.

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SUSTAINABLE DEVELOPMENT: A REALITY OR MYTH IN 21ST CENTURY

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ABSTRACT

The present age is the age of development, achievements and success, and for this development the necessary cost has to be pay by everyone. On which cost the development could be done was coined as sustainable development. Sustainable development is a dream which is in dream of every one either an industrialist or bureaucrat or environmentalist or any one irrespective of his or her occupation, living of standard or livelihood. But here the question is whether this dream is achievable or not. Here in the age of development the prime aim of every country is to have development so that they can be in the picture of developed countries rather than developing. But development is at what cost, is on the cost of environment, life, pollution, resources, and the most important the future of the world. In this paper the researcher wants to address the paramount issue whether sustainable development is a myth or a reality which is achievable by the efforts of humankind. Furthermore this paper will discuss the positive and negative issues of sustainable development. Let's see whether we can altogether think about any development with sustainability or not.

Keywords: Sustainable development, Industrial Development, Environment, Future of world

1. INTRODUCTION

'Sustainable Development' (SD) in 21st century emerged as the latest development catchphrase where a wide range of governmental organizations as well as non-governmental have catch it as the new paradigm of development. These include an incomplete perception of the problems of poverty and environmental degradation, and confusion about the role of economic growth and about the concepts of sustainability and participation. How these weaknesses can lead to inadequacies and contradictions in policy making is demonstrated in the context of international trade, agriculture, and forestryⁱ.

2. OBJECTIVES OF THE PAPER

“The critical objectives which follow from the concept of SD” are

- (1) To review growth;
- (2) To examine the changing quality of growth;
- (3) To meet essential needs for jobs, food, energy, water, and sanitation;
- (4) To ensure a sustainable level of population;
- (5) To preserve and conserving and enhancing the resource base;
- (6) To reorient technology and managing risk;
- (7) To merge environment and economics in decision making; and
- (8) To reorient international economic relations

However, the mainstream formulation of SD suffers from significant weaknesses in

- (a) Its characterization of the problems of poverty and environmental degradation;
- (b) Its conceptualization of the objectives of development, sustainability and participation;
- (c) The strategy it has adopted in the face of incomplete knowledge and uncertainty.ⁱⁱ

The areas of human activity where there appears to be an absence of policy or no evidence of policy taking place are numerous. Air travel deserves to be singled out here as the most obvious example of this worldwide. There is ample evidence of the negative environmental impacts of emissions from air transport, but airport expansion is high on the agendas of almost all developed societies and governments are not only failing to regulate air travel, but are rather promoting it. A Scottish example of where policy rhetoric exists but there is a lack of adequate action is in terms of greening the curriculum where very little has been achieved in Higher and Further Educationⁱⁱⁱ.

3. SUSTAINABLE DEVELOPMENT (SD): AN INTRODUCTION

"What is SD?" is being asked increasingly frequently without, however, clear answers forthcoming. SD is in real danger of becoming a cliché like appropriate technology -- a fashionable phrase that everyone pays homage to but nobody cares to define. Four years ago, Tolba lamented that SD had become "an article of faith, a

shibboleth; often used, but little explained" (Tolba, 1984a)^{iv}; The United Nations launched the Sustainable Development Goals (SDGs). Meghnad Desai^v believes that these goals are a part and parcel of the UN's "non-stop search for relevance".

In comparison, sustainable development is most of the times interpreted as "sustained change," "sustained growth," or simply "successful" development.

3.1 Sustainable development = development + sustainability

In the mainstream interpretation of SD, ecological sustainability is a desired attribute of any pattern of human activities that is the goal of the developmental process. In other words, SD is understood as "a form of societal change that, in addition to traditional developmental objectives, has the objective or constraint of ecological sustainability." ^{vi}

4. SUSTAINABLE DEVELOPMENT: AN ACHIEVABLE DREAM OR A MYTH

The word sustainable becomes so popular that it can be heard everywhere, in all sorts of related, marginally related or even in unrelated contexts. But "sustainable," does not mean something which at first conjures up only to sense of environmental virtue, actually belongs agriculture to economics. The examination whether this dream or a myth is based on so many factors, the examination of those factors is here by discussed:-

4.1 To examine what sustainability really means

The Brundtland commission report^{vii} the sustainable development defines as "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Or, in the words of countless kindergarten teachers, "Don't take more than your share"^{viii}. It is important to note here that the present definition is nothing doing with environment it says that 'decide what is your need and how you can settle it in best ways so that future generation even can take benefit of the same. That point leads to the second myth...

4.2 To analyse whether Sustainability is all about the environment

The sustainability movement itself is not just the word rather its focus was to find different ways for poor nations so that they can catch up to richer ones in better standard of living. The purpose could be achieved only by giving a chance to disadvantaged countries through a better access to natural resources, which includes water, energy and food and all of these can come by one way or another i.e. from the environment only. Paul Hawken^{ix} said "If too many of us use resources inefficiently or generate waste too quickly for the environment to absorb and process, future generations obviously won't be able to meet their needs". Here he wants to focus on the appropriate use of resources so that we will gift something to future generations too. In case, we continue to pour carbon dioxide (CO₂) into the air, for example, we won't necessarily exhaust resources (there's plenty of coal still in the ground), but we will modify the climate in such ways that would very likely impose huge burden on future generations. The same goes for the poisonous by-products other than CO₂ from all kinds of human activity, from manufacturing to mining to energy generation to agriculture, that get dumped on the land and into streams, oceans and the atmosphere^x.

4.3 To examine whether sustainable development is all about recycling

Shana Weber^{xi} discussed about recycling and observed that "For some reason, recycling was the enduring message that came out of the environmental movement in the early 1970s." And of course, recycling is very important: reusing paper, wood, metals, and plastics rather than tossing them reduces the need to extract raw materials from the ground, forests and fossil-fuel deposits.. But it is just a piece of the puzzle. "I deal with the people who run the recycling program here," Weber notes, "but also with purchasing, dining services, the people who clean the buildings. The most important areas by far in terms of sustainability are energy and transportation." If you think you are living sustainably because you recycle, she says, you need to think again^{xii}.

4.4 To analyse whether Sustainability is too expensive

Another myth about sustainability says it is very expensive, but it is not so, doing an appropriate thing in an appropriate manner by applying the appropriate means. For instance the Pentagon is determined to cut its energy use by a third, both to save money and to reduce its dependence on risky foreign oil supplies.

4.5 To see whether Sustainability means lowering our standard of living

The next myth about sustainability is not at all true. It does mean that 'to do more effective with less means', but as Hawken argues that, "Once we start to organize ourselves and innovate within that mind-set, the breakthroughs are extraordinary. They will allow us to achieve greatly superior rates of resource productivity, which in turn allow us to be prosperous, fed, clad, and secure"^{xiii}.

4.6 To examine whether new technology is always the answer of sustainability

Another myth is **whether new technology is always the answer of sustainability** or not, it is not necessary that always new technology can sustain the development. In other words, sometimes existing technology can make a huge difference. Sometimes it takes a creative business model. Mark Lee^{xiv} very beautifully observed that “He’s delivering distance, not better batteries, there’s an Italian utility that’s selling its customers hot water, not energy to heat water. It’s a different way of measuring, and it gives the company an incentive to be more efficient so it can be more profitable^{xv}”.

4.7 To examine whether Sustainability is ultimately a population problem

Although this present hypothesis is not a myth however this represents a false solution. Environmental problem is ultimately a population problem. Population experts agree that the best way to limit population is to educate women and raise the standard of living generally in developing countries. But that strategy cannot possibly happen quickly enough to put a dent in the population on any useful timescale. The U.N. projects that the planet will have to sustain another 2.6 billion people by 2050. At current population level of 6.5 billion, people are using up resources across the world at an unsustainable rate^{xvi}.

It can be finally observed after the analysis of these myths that sustainability is important and it is the way for healthy development, no one has a right to live on the cost of future. One can’t really declare any practice “sustainable” until he or she has done a complete life-cycle analysis of its environmental costs.

5. CONCLUSION: DILEMMAS AND AGENDAS

“If you want to go from applause to action, you have to add another step: accountability, Targets without accountability are not worth having^{xvii}”

“We have to tackle the reasons why people flee and are driven from their homes,” she said. “Our 2030 agenda provides exactly the right framework^{xviii}”

The proponents of Sustainable development are faced with a predicament that affects any political action and social change. In other words, Sustainable development is an attempt to have one's cake and eat it too.

More specifically, proponents and analysts of SD need to:

- (a) To clearly reject the attempts (and temptation) to focus on economic growth as at means to poverty removal and/or environmental sustainability;
- (b) To recognize the internal inconsistencies and inadequacies in the theory and practice of neoclassical economics, particularly as it restates to environmental and distributional issues: in economic analyses, move away from arcane mathematical models toward exploring empirical questions such as limits to the substitution of capital for resources, impacts of different sustainability policies on different economic systems, etc.
- (c) To accept the existence of structural, technological and cultural causes of both poverty and environmental degradation: develop methodologies for estimating the relative importance of and interactions between these causes in specific situations: and explore political, institutional and educational solutions to them:
- (d) To understand the multiple dimensions of sustainability, and attempt to develop measures, criteria and principles for them; and
- (e) To explore what patterns and levels of resource demand and use would be compatible with different forms or levels of ecological and social sustainability, and with different notions of equity and social justice.^{xix}

• Sustainable development policy should reflect local values and be capable of delivery through existing national and local decision-making frameworks. To achieve this better understanding is needed of the scale, level, magnitude and spatial dimensions of both the problem of unsustainable activities in Scotland and their solutions. • The biggest gains for sustainability are most likely to result from legislative and institutional changes rather than from individual or household behaviour change. The Executive should consider separate areas of policy delivery (such as waste, transport, and energy) and decide whether institutional, legislative or public behaviour change is the most appropriate and effective route for advancing a given sustainability goal. • Where public behaviour change is considered the most fruitful way forward, a step by- step approach is needed, in which external barriers are removed before psychological or attitudinal factors are addressed. It is much easier to change behaviour through automatic responses to changes in opportunity than to challenge ingrained attitudes and perceptions. Provision of practical information is a key element in behaviour change, but campaigns need to be well targeted and coordinated with other measures. • There should be better integration between social and green procurement to create a more holistic sustainable procurement approach. There is a

pressing need to introduce mechanisms whereby assessment and evaluation of sustainable procurement can be undertaken and to harmonize sustainable public procurement with trade policies. • Awareness-raising to enable consumers to understand the implications of their food purchasing decisions and the way goods and services are used after purchase should be key priorities. • Making evident the links between obesity, nutrition and the sustainability of people's daily lifestyle is likely to be one of the most effective ways of promoting more sustainable levels of consumption and encouraging people to consume and waste less. In tandem with such information campaigns, people need to be offered the opportunity to buy more eco-friendly products and to adopt less environmentally damaging lifestyles. • There is a need for a systematic approach to strategic infrastructure provision through a national spatial perspective to replace competitive bidding for infrastructure resources. Community planning needs to more directly recognise sustainable development and proactively aim to promote this through all planning decisions. Strategic Environmental Assessment in relation to plans and programmes, and Environmental Impact Assessment, in relation to particular development applications, may be suitable mechanisms for this. • A need and considerable opportunities exist for better integration of sustainable development throughout the education curriculum in Scotland^{xx}.

ⁱ Sharachchandra M., "Sustainable Development: A Critical Review", World Development, Vol.19, No. 6, 1991, pp. 607-621.

ⁱⁱ *Supra* note ii.

ⁱⁱⁱ University of Westminster and the Law School & University of Strathclyde, "Sustainable development: A review of international literature", The Centre for Sustainable Development & Scottish Executive Social Research, 2006, available at: www.scotland.gov.uk/socialresearch.

^{iv} Mostafa Kamal Tolba (8 December 1922) is an Egyptian scientist who served 17-year tenure as Executive Director of the United Nations Environment Programme (UNEP). Tolba graduated from Cairo University in 1943, and obtained a PhD from Imperial College London five years later. He established his own school in microbiology at Cairo University's Faculty of Science, and also taught at the University of Baghdad during the 1950s. In addition to his academic career, Tolba worked in the Egyptian civil service. Tolba led Egypt's delegation to the landmark 1972 Stockholm Conference, which established the United Nations Environment Programme. Tolba became UNEP's Deputy Executive Director immediately after the conference, and two years later was promoted to Executive Director. During his long tenure (1975–1992), he played a role in the fight against ozone depletion, which culminated with the Vienna Convention (1985) and the Montreal Protocol (1987).

^v Meghnad Jagdishchandra Desai, Baron Desai (10 July 1940) is an Indian-born, naturalised British economist and Labour politician. He unsuccessfully stood for the Speaker in the British House of Lords in 2011, the first ever non-UK born candidate to do so. He has been awarded the Padma Bhushan, the third highest civilian award in the Republic of India, in 2008.

^{vi} *Supra* note ii.

^{vii} The World Commission on Environment and Development (WCED), the Brundtland Commission's mission is to unite countries to pursue sustainable development together. The Chairman of the Commission, Gro Harlem Brundtland, was appointed as a former Secretary General of the United Nations, in December 1983. At the time, the UN General Assembly realized that there was a heavy deterioration of the human environment and natural resources. To rally countries to work and pursue sustainable development together, the UN decided to establish the Brundtland Commission. Gro Harlem Brundtland was the former Prime Minister of Norway and was chosen due to her strong background in the sciences and public health. The Brundtland Commission officially dissolved in December 1987 after releasing *Our Common Future*, also known as the *Brundtland Report*, in October 1987, a document which coined, and defined the meaning of the term "Sustainable Development". *Our Common Future* won the University of Louisville Grawemeyer Award in 1991. The organization Centre for Our Common Future was started in April 1988 to take the place of the Commission.

^{viii} Lemonick D. Michael, "Scientific American Top 10 Myths about Sustainability, Even advocates for more responsible, environmentally benign ways of life harbor misunderstandings of what "sustainability" is all about", Mar 1, 2009, available at: <http://www.scientificamerican.com/article/top-10-myths-about-sustainability/?page=1>

^{ix} Paul Hawken, was the author (his latest book is *Blessed Unrest: How the Largest Movement in the World Came into Being, and Why No One Saw it Coming*) and entrepreneur (he's a co-founder of the Smith & Hawken garden tools company) who helped to found the sustainability movement: "We have an economy where we steal the future, sell it in the present, and call it GDP [gross domestic product]."

^x Supra note x

^{xi} Shana Weber directs the Office of Sustainability and has served as lecturer in the Department of Ecology and Evolutionary Biology at Princeton University. Dr. Weber has coordinated university efforts in comprehensive campus-based sustainability study and operational implementation since 2006. Her past research areas include the intersection of climate change impacts and land use history, and population biology of culturally-significant wetland vegetation. Current research interest includes climate-change driven population dynamics of high altitude small mammals, and collaborative applied sustainability research across academic institutions.

^{xii} Supra note x

^{xiii} Id at p. 2.

^{xiv} Mark Lee, CEO of the London consulting firm Sustainability

^{xv} Supra note x, at p. 3

^{xvi} Id at p.4

^{xvii} David Miliband, was the CEO of the International Rescue Committee, in remarks at a Unicef event. David (15 July 1965) is a British Labour Party politician who was the Secretary of State for Foreign and Commonwealth Affairs from 2007 to 2010 and the Member of Parliament (MP) for South Shields from 2001 to 2013. Aged 29 he became Tony Blair's Head of Policy whilst the Labour Party was in opposition, and he was a major contributor to Labour's manifesto for the 1997 election, which brought the party to power in a landslide victory. Blair subsequently made him head of the Prime Minister's Policy Unit from 1997 to 2001, at which point Miliband was elected to Parliament for the seat of South Shields.

^{xviii} Angela Dorothea Merkel (17 July 1954) is a German politician and former research scientist who has been the Chancellor of Germany since 2005 and the Leader of the Christian Democratic Union (CDU) since 2000. She is the first woman to hold either office.

^{xix} Supra note ii

^{xx} Supra note v

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MANUSCRIPT SUBMISSION

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1. Manuscripts should be submitted preferably through email and the research article / paper should preferably not exceed 8 – 10 pages in all.
2. Book review must contain the name of the author and the book reviewed, the place of publication and publisher, date of publication, number of pages and price.
3. Manuscripts should be typed in 12 font-size, Times New Roman, single spaced with 1” margin on a standard A4 size paper. Manuscripts should be organized in the following order: title, name(s) of author(s) and his/her (their) complete affiliation(s) including zip code(s), Abstract (not exceeding 350 words), Introduction, Main body of paper, Conclusion and References.
4. The title of the paper should be in capital letters, bold, size 16” and centered at the top of the first page. The author(s) and affiliations(s) should be centered, bold, size 14” and single-spaced, beginning from the second line below the title.

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5. The abstract should summarize the context, content and conclusions of the paper in less than 350 words in 12 points italic Times New Roman. The abstract should have about five key words in alphabetical order separated by comma of 12 points italic Times New Roman.
6. Figures and tables should be centered, separately numbered, self explained. Please note that table titles must be above the table and sources of data should be mentioned below the table. The authors should ensure that tables and figures are referred to from the main text.

EXAMPLES OF REFERENCES

All references must be arranged first alphabetically and then it may be further sorted chronologically also.

• Single author journal article:

Fox, S. (1984). Empowerment as a catalyst for change: an example for the food industry. *Supply Chain Management*, 2(3), 29–33.

Bateson, C. D.,(2006), ‘Doing Business after the Fall: The Virtue of Moral Hypocrisy’, *Journal of Business Ethics*, 66: 321 – 335

• Multiple author journal article:

Khan, M. R., Islam, A. F. M. M., & Das, D. (1886). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

Raine, A. (Ed.). (2006). *Crime and schizophrenia: Causes and cures*. New York: Nova Science.

- **Edited book having more than one editor:**

Greenspan, E. L., & Rosenberg, M. (Eds.). (2009). *Martin's annual criminal code: Student edition 2010*. Aurora, ON: Canada Law Book.

- **Chapter in edited book having one editor:**

Bessley, M., & Wilson, P. (1984). Public policy and small firms in Britain. In Levicki, C. (Ed.), *Small Business Theory and Policy* (pp. 111–126). London: Croom Helm.

- **Chapter in edited book having more than one editor:**

Young, M. E., & Wasserman, E. A. (2005). Theories of learning. In K. Lamberts, & R. L. Goldstone (Eds.), *Handbook of cognition* (pp. 161-182). Thousand Oaks, CA: Sage.

- **Electronic sources should include the URL of the website at which they may be found, as shown:**

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38-48. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap>

- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

- **Website of any institution:**

Central Bank of India (2005). *Income Recognition Norms Definition of NPA*. Retrieved August 10, 2005, from <http://www.centralbankofindia.co.in/home/index1.htm>, viewed on

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