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Dipti Rekha Mohapatra

A STUDY ON EFFECTIVENESS OF SALES PROMOTION TECHNIQUES IN RELIANCE COMMUNICATION

Dr. Osman Bin Salam

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ABSTRACT

Sales promotion progress has been a noteworthy contraption for publicizing and its centrality has been reaching out on a particularly crucial level finished the year's .One of the clarification for business advancement is to stir a speedy effect on the buy direct of the alliance's purchasers. Association together's need to rethink the relationship among air and lead of their purchasers. Sales promotion improvements are stacked with feeling in exhibiting purchasers to things inquisitively and can fill in as key confined time skilled most importantly conditions of new thing introduction. The purpose of this paper is to study of the affect of sales promotion on consumer interest to purchase products.

Keywords: Sales promotion, publicizing, alliance's, purchasers

INTRODUCTION

In affecting, the term demonstrating has changed and made over some interface of time, today publicizing is based around giving evident purposes basic to the client, these immaculate conditions will be given and a regard based trade will happen. Philip Kotler depicts progressing as 'Fulfilling necessities and needs through a trade procedure's Methodologies improvement, a key settling in publicizing tries, consolidates a substitute collection of instigating power contraptions, all around promptly, expected that would empower snappier or more critical buy of specific things or relationship by buyers or the exchange. Slighting the way that publicizing offers motivation to purchase, deals advancement offers a partner to purchase. Plans propel wires gadgets for client improvement (tests, coupons, money markdown offers, process off, premiums, prizes, support rewards, free trials, guarantees, tie-in sorts of propel, cross-sorts of propel, elucidation behind procurement presentations, and showings); exchange propel (costs off, publicizing and show rewards, and free things); and methodologies drive degrees of propel (expos and traditions, challenge for deals reps, and quality progressing). These contraptions are utilized by most affiliations, including non-advantage affiliations. Spots of demand, for instance, consistently support bingo redirections, theater parties, tribute dinners and wagers. Procedures advancement utilizes have been making as a level of joined spending use yearly all through the previous two decades. A couple of territories add to this splendid change, especially in the purchaser markets. Progress is over the long haul more observed by the best relationship as a persuading courses of action instrument; all the besides thing chief are had all the critical qualities to utilize deals advancement devices; and thing specialists are under strain to deliver current methodologies. In like way, the measure of brands has broadened; contenders utilize advancements uncontrollably; many brands are seen as for all objectives and purposes vague; clients are more cost composed; the exchange has requested more blueprints from the producers; and the publicizing suitability has declined as a result of creating costs, media mess, and authentic restrictions.

The convenient contrast in offers advancement media has influenced turmoil to like the publicizing mess. Producers need to discover approaches to manage administer transcend the mistake for example, by offering more obvious coupon-recovery respects or utilizing all the all the all the more dazzling elucidation behind securing presentations and showings.

Each ace needs to expand the offer of stock that he bargains in. He can comprehend a couple of courses thusly. You may have turned into a couple of answers concerning "lakhpati bano", "win a visit to Singapore", "30% additional in a pack of one kg", "scratch the card and win a prize" et cetera. You may in like way have seen endowments like lunch box, pencil box, pen, designed pocket and so on offered free with a couple of things. There are in addition trade offers, as accordingly of existing model of TV you can get another model at a diminished cost. All these are motivations offered by creators or shippers to make the offer of their stock. These activating forces might be as free cases, favors, discount coupons, showings, shows up, bothers and whatnot. Every last one of these measures usually persuade the clients to purchase adequately and thusly, it makes offers of the thing. This approach of offering things is known as "Plans Progress". You have learnt about publicizing and individual offering in the prior lessons. Single offering consolidates versus contact with particular people, while publicizing is upheld towards unlimited clients. They other than help in expanding offers of stock. hus, publicizing can be utilized as systems for correspondence to illuminate potential clients about the major boosts offered for deals progress. Particular offering can likewise join correspondence of the sparkles to single clients. Regardless, deals advancement contrasts from publicizing and individual offering like its approach and strategy.

Plans progress gets at this moment, non-stressing structures to help up deals in various ways. These offers are not open to the clients dependably. Amidst celebrations, end of the seasons, year zenith and some remarkable events these plans are all around found in the market. In this way, deals improvement contains all exercises other than publicizing and individual pitching that assistance to make offers of a specific thing.

NEED OF THE STUDY

The business world today is a world of competition. A business cannot service if its products do not sell in the market. To identify the need in reliance communication, to know the sales value of reliance communication, to suggest the measures of the improvement of communications performance of reliance. There is a wide scope in reliance communication; there are many opportunities in reliance communications.

SCOPE AND PERIOD OF THE STUDY

Sales Promotion is a comprehensive term, and covers the entire gamut of Advertising, publicity, Public relations, Personal Selling and Sales Promotion.

OBJECTIVES OF THE SURVEY

- 1. To know various techniques involved in the company
- 2. To study the market share captured by reliance company
- 3. To know the specific techniques through major share of sales captured
- 4. To know the impact of advertising on purchase of reliance broadband
- 5. To suggest further sales promotional technique

RESEARCH METHODOLOGY

Research Design:

• The study is an exploratory research design

Data Collection

- Primary Data: Through survey using structured questionnaire.
- Secondary Data: Company resources

AREA OF STUDY

Hyderabad and Secunderabad City in the state of Telangana

- Sample size: 50 customers
- Sampling techniques: Random sampling

LIMITATIONS OF THE STUDY

- 1. The study was restricted to twin cities only.
- 2. Also time which might be a constraint as the study was limited to 45 days only
- 3. The major limitations of the project is time factor
- 4. The data which I collected from the various branch office, there input may be correct or may not be correct
- 5. The analysis is done through the questionnaire which consists of only small sample, by that I can't judge whole companies sales promotion techniques

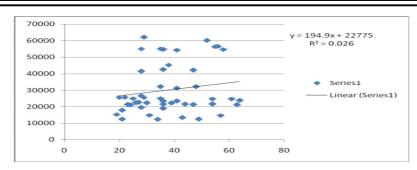
DATA ANALYSIS

The correlation between age and income group of the Respondents

| | Age | Income |
|---------------|---------------|--------|
| | 1 | |
| Age Income | 1 0.162908 | 1 |

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Here we can observe that the value is near zero and we can determine that we don't find any corelation between age and income of the respondents.

The Hypothesis is

H0: There is no significance difference between Age and income of the respondents

H1:There is a significance difference between age and incomeof the respondents

| Regressio | n Statistics | | | | | | | |
|--------------|--------------|-------------|----------|----------|--------------|----------|----------|----------|
| Multiple R | 0.162907788 | | | | | | | |
| R Square | 0.026538947 | | | | | | | |
| Adjusted R | 0.006258509 | | | | | | | |
| Square | | | | | | | | |
| Standard | 12.53526379 | | | | | | | |
| Error | | | | | | | | |
| Observations | 50 | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance | | | |
| | | | | | F | | | |
| Regression | 1 | 205.623764 | 205.6238 | 1.308598 | 0.258321 | | | |
| Residual | 48 | 7542.376236 | 157.1328 | | | | | |
| Total | 49 | 7748 | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper | Lower | Upper |
| | | Error | | | | 95% | 95.0% | 95.0% |
| Intercept | 34.28011947 | 4.014142652 | 8.539836 | 3.41E-11 | 26.20914 | 42.35109 | 26.20914 | 42.35109 |
| Income | 0.000136146 | 0.000119015 | 1.14394 | 0.258321 | -0.0001 | 0.000375 | -0.0001 | 0.000375 |

INTERPRETATION

As we can observe that the value of P is more than 0.05 which is alpha value so H0 is accepted and alternative is rejected and w can find there is a significance diffence between age and income of the respondents

Table:Age and income of Respondents

| nc.Age a | ie. Age and meome of Kespond | | | | | |
|----------|------------------------------|--------|--|--|--|--|
| S.no | Age | Income | | | | |
| 1 | 21 | 17925 | | | | |
| 2 | 22 | 25552 | | | | |
| 3 | 27 | 22566 | | | | |
| 4 | 28 | 19547 | | | | |
| 5 | 19 | 15222 | | | | |
| 6 | 28 | 41511 | | | | |
| 7 | 54 | 21556 | | | | |
| 8 | 63 | 21162 | | | | |
| 9 | 24 | 21021 | | | | |
| 10 | 31 | 14756 | | | | |
| 11 | 30 | 22216 | | | | |
| 12 | 20 | 25416 | | | | |
| 13 | 26 | 22315 | | | | |
| 14 | 34 | 12212 | | | | |
| 15 | 35 | 32163 | | | | |
| 16 | 39 | 22126 | | | | |
| 17 | 41 | 31212 | | | | |
| 18 | 29 | 62123 | | | | |
| | | | | | | |

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| 19 | 47 | |
|----|----|-------|
| 17 | 47 | 21251 |
| 20 | 43 | 13322 |
| 21 | 52 | 60154 |
| 22 | 56 | 56545 |
| 23 | 55 | 56321 |
| 24 | 41 | 54122 |
| 25 | 38 | 45221 |
| 26 | 21 | 12335 |
| 27 | 36 | 23263 |
| 28 | 41 | 23321 |
| 29 | 44 | 21465 |
| 30 | 48 | 32156 |
| 31 | 47 | 42156 |
| 32 | 49 | 12365 |
| 33 | 57 | 14563 |
| 34 | 54 | 24556 |
| 35 | 58 | 54523 |
| 36 | 64 | 23654 |
| 37 | 36 | 21456 |
| 38 | 29 | 25413 |
| 39 | 35 | 54962 |
| 40 | 36 | 42521 |
| 41 | 54 | 21563 |
| 42 | 28 | 54896 |
| 43 | 36 | 54526 |
| 44 | 61 | 24521 |
| 45 | 36 | 54786 |
| 46 | 28 | 26599 |
| 47 | 35 | 24859 |
| 48 | 36 | 19000 |
| 49 | 25 | 24785 |
| 50 | 23 | 21258 |

| Gender | No. respondents | Options |
|--------|-----------------|---------|
| Male | 42 | 0 |
| Female | 8 | 5 |
| Total | 50 | 50 |

Gender with is most effective for the sales of your product and it was found correlation and regression analysis to find out the relationship between the two and with options of

| a. Price | b . Discounts Where a=1,b= | •••••••••••••••••••••••••••••••••••••• |
|---------------------|--------------------------------------|--|
| | Correlation Table | |
| | Gender | strategic option |
| Gender | 1 | |
| strategic option | -0.126852994 | 1 |
| y = -0.079x + 2.523 | | |
| $R^2 = 0.016$ | | |

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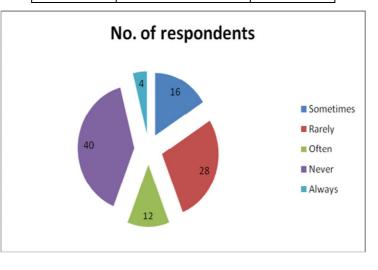
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INTERPRETATION

As we can observe from the correlation table that it shows a strong negative correlation between gender and effective sales of the company products.

| Does a | ny time | vour retailer | jointly | y conducted a | ny sales | promotion | activities | with you | ? |
|--------|---------|---------------|---------|---------------|----------|-----------|------------|----------|---|
| | | | | | | | | | |

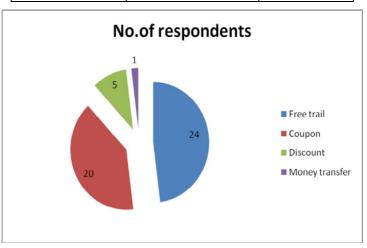
| Particulars | No. of respondents | Percentage |
|-------------|--------------------|------------|
| Sometimes | 8 | 16 |
| Rarely | 14 | 28 |
| Often | 6 | 12 |
| Never | 20 | 40 |
| Always | 2 | 4 |
| Total | 50 | 100 |



INTERPRETATION

From the above table & graph we can state that best retailer jointly conduct any sales promotion techniques with the head office is 40% respondents says never, 28% respondents says Rarely, 16% respondents says sometimes, 12% respondents says often, 4% respondents says always.

| Particluars | No.of respondents | Percentage |
|----------------|-------------------|------------|
| Free trail | 24 | 48 |
| Coupon | 20 | 40 |
| Discount | 5 | 10 |
| Money transfer | 1 | 2 |
| Total | 50 | 100 |



INTERPRETATION

From the above table & graph we can state that respondents opinion on customer dealer relationship 48% respondents say it is free trial, 40% say it is coupon, 10% says Discount, 2% says money transfer.

What are the new product sales promotional techniques you adopted

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CONCLUSION

Promotional tools that are most successful are hence those which incentivize the customer immediately like price discounts. From the article it can be ascertain that the print media is the best option for making the promotional activities of the firm, as the customers seek maximum information from it and will make a good use of it. From the article and study it can be ascertained that Sales promotion offers provide a definite incentive to buy, but their impact on the sales promotion of an Communication products is still debatable. These study give an indication that "Promotional Offers" can be used for increasing the short-term gain but their application in building brand image over a long term is limited.

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A COMPARITIVE STUDY ON MUTUAL FUNDS WITH REFERENCES TO AXIS FUND AND DSP BLACK ROCK FUND

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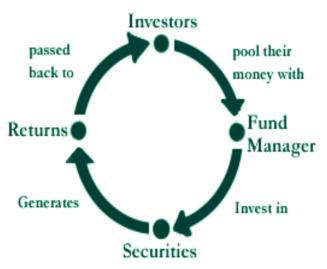
ABSTRACT

The Indian mutual Fund Industry is over four-decade-old and is a quickly benefitting related district. Shared Additional plans have changed into the most upheld meander road in the current past. Considering the amazing yields, liquidity, security, skilled association and relative all around ensured, budgetary master's lean toward the Anticipated Store course for their hypothesis organizing. The present research is on picking the parts affecting the execution of Normal Store regard outlines. AUM is apparently going to make at an equivalent rate later on either by standards of the movement in the offer trading structure costs and furthermore in light of the reason that the Crucial Store industry is the most required hypothesis road for the Agents. The basic saw illuminations behind the Cash related stars to put resources into Ordinary Store outlines are Security, Liquidity, Assessment diminishment, Central focuses and Capital Gratefulness for the attempts.

Keywords: Mutual Funds, Security, Liquidity, Assessment diminishment

INTRODUCTION

Standard assets or Mutual Funds are fiscal stars, which store the hold resources of budgetary wonders and place them in a huge and all around updated game-plan of securities, for example, money show instruments, corporate and government securities and regard offers of business portions. A typical store is a pool of standard assets contributed by various money related chiefs, who have no contact with each other.



Conventional assets are imagined as foundations for planning unimportant money related experts with roads of premiums in the capital market. Since superfluous cash related experts for the most part don't have satisfactory time, information, experience and assets for especially getting to the capital market, they need to depend on an inside individual, which handles arranged meander choices and gives essential central purposes behind professional most extreme.

The clarifications behind energy for the budgetary experts are diminishment in trustworthiness, virtuoso talented connection, invigorated portfolios, and liquidity of speculation and assessment decreases. By pooling their inspirations of vitality through standard assets, money related virtuosos satisfy economies of scale. The premiums of the analysts are ensured by the Securities and Trade Driving get-together of India, which goes about as a sheltered puppy. Shared assets are directed by the SEBI (Conventional Assets) Controls, 1993. These great conditions can survive and prosper just on the off chance that they can satisfy the necessities and trusts of their unmistakable individuals. Targets went up against by the money related stars while making direct theories: Obliged assets in the hands of budgetary specialists a fantastic bit of the time remove them from securities exchange transactions. Lack of motivations behind interest squares analysts to have an adjusted and isolates portfolio. Nonappearance of genius learning related with hypothesis business limits budgetary specialists to work highly in the market. Little specialists can hardly stay to have ex-cautious meander get-togethers. To purchase shares, cash related masters need to interface with share merchants who are the comprehensive group

from stock trade and need to pay their moneylender. They scarcely approach regard delicate data in time. It is troublesome for them to know the change occurring in share advance and corporate part. Firm assignments are preposterous for insignificant cash related supervisors when there is a case of over choice to open issues.

NEED AND IMPORTANCE

In the space of globalization where cash moves starting with one place then onto the running with, an examiner has number of meander openings. Each budgetary professional is looking yield yet at an all around ensured. Capital markets are a road for the money related specialists to stop their motivations of premium. In any case, exchanging capital market requires surprising background and following the headways. Regular additional follows up for advantage on cash related ace [i.e. getting and offering of securities in the capital market]. Enter hold in a general sense offers unmistakable sorts of plans to suit the money related ace basic. Resource Connection Partnership all around handles the inclinations and graphs a portfolio for it. Regard spares are all around inclined to high hazard. These in like way offer high rate of return, over a drawn out stretch out of time. Since change rate in regard share cost is relied upon to take after the advantage of the affiliation and the cash related stars ought to have the ability to withstand the risk. This study is undertaken to evaluate the risk involved and the return earned by the funds over a period of time.

SCOPE OF THE STUDY

The Scopeof this article unites gaining information about the regular assets industry. Everything considered this joined the positive examination of primary funds, their sorts, awesome conditions, and ebb and flow situation, values as a touch of shared store, the risk and return relationship identified with the speculation avenues. It has permitted to apply the budgetary arranging strategy finally and underwrite ting cash related frameworks to analysts. It connected with to make mind among the budgetary supervisors and it in like way helps analysts in understanding the hazard and return in the store contributing, proposing model portfolios and picking the correct hold.

OBJECTIVES OF THE STUDY

- To determine the best performing mutual fund company.
- To compare the NAVs of the selected secutirites
- To compare investment pattern of the three funds.
- To understand each company performance based on their NAVs.
- To examine which fund is better to invest from these there securities

METHODOLOGY

Methodology Data collection methods

The study is based on both primary and secondary data and examines the availability of bank deposits v/s mutual funds. The results are drawn mainly from the secondary and primary data collected.

Primary Data- Primary data has been collected from the interaction with the officials of the company

Secondary Data- Secondary data has been collected from the various sources such as Publications of the company, Business magazines, Journals, text books, Web sites and Annual reports

In order to gain information on current practices and problems, the area chosen for study are the emerging and competitive companies in and around Hyderabad city.

LIMITATIONS OF THE STUDY

- The study is conducted in short period due to which the study may not be detailed in all aspects.
- The study is limited due to non availability of analytical software.
- Limited sample data has been used to analyze the fund performance.
- · Analysis of one index based fund across the three companies.
- The study is based on the secondary data available from monthly fact sheets, web sites, offer documents, magazines and newspapers etc. as primary data was not accessible.

DATA ANALYSIS

DSP Black Rock Balanced Fund - Direct Plan – Dividend

| NAV date | Sale Price | | |
|----------|------------|--------|--------|
| 1-Dec-16 | 33.709 | 33.372 | 33.709 |
| 2-Dec-16 | 33.342 | 33.009 | 33.342 |

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16-Feb-17

17-Feb-17

35.858

36.03

36.216

36.121

36.022

35.942

35.897

35.764

35.537

35.177

35.346

35.53

| J | | | | |
|-----------|--------|--------|--------|--|
| 5-Dec-16 | 33.517 | 33.182 | 33.517 | |
| 6-Dec-16 | 33.533 | 33.198 | 33.533 | |
| 7-Dec-16 | 33.286 | 32.953 | 33.286 | |
| 8-Dec-16 | 33.653 | 33.316 | 33.653 | |
| 9-Dec-16 | 33.705 | 33.368 | 33.705 | |
| 12-Dec-16 | 33.415 | 33.081 | 33.415 | |
| 13-Dec-16 | 33.428 | 33.094 | 33.428 | |
| 14-Dec-16 | 33.254 | 32.921 | 33.254 | |
| 15-Dec-16 | 33.151 | 32.819 | 33.151 | |
| 16-Dec-16 | 33.057 | 32.726 | 33.057 | |
| 19-Dec-16 | 32.947 | 32.618 | 32.947 | |
| 20-Dec-16 | 32.76 | 32.432 | 32.76 | |
| 21-Dec-16 | 32.713 | 32.386 | 32.713 | |
| 22-Dec-16 | 32.408 | 32.084 | 32.408 | |
| 23-Dec-16 | 32.457 | 32.132 | 32.457 | |
| 26-Dec-16 | 32.082 | 31.761 | 32.082 | |
| 27-Dec-16 | 32.447 | 32.123 | 32.447 | |
| 28-Dec-16 | 32.524 | 32.199 | 32.524 | |
| 29-Dec-16 | 32.774 | 32.446 | 32.774 | |
| 30-Dec-16 | 32.974 | 32.644 | 32.974 | |
| 31-Dec-16 | 32.975 | 32.645 | 32.975 | |
| 2-Jan-17 | 33.17 | 32.838 | 33.17 | |
| 3-Jan-17 | 33.387 | 33.053 | 33.387 | |
| 4-Jan-17 | 33.4 | 33.066 | 33.4 | |
| 5-Jan-17 | 33.711 | 33.374 | 33.711 | |
| 6-Jan-17 | 33.609 | 33.273 | 33.609 | |
| 9-Jan-17 | 33.607 | 33.271 | 33.607 | |
| 10-Jan-17 | 33.803 | 33.465 | 33.803 | |
| 11-Jan-17 | 34.243 | 33.901 | 34.243 | |
| 12-Jan-17 | 34.269 | 33.926 | 34.269 | |
| 13-Jan-17 | 34.238 | 33.896 | 34.238 | |
| 16-Jan-17 | 34.342 | 33.999 | 34.342 | |
| 17-Jan-17 | 34.389 | 34.045 | 34.389 | |
| 18-Jan-17 | 34.554 | 34.208 | 34.554 | |
| 19-Jan-17 | 34.663 | 34.316 | 34.663 | |
| 20-Jan-17 | 34.382 | 34.038 | 34.382 | |
| 23-Jan-17 | 34.586 | 34.24 | 34.586 | |
| 24-Jan-17 | 34.852 | 34.503 | 34.852 | |
| 25-Jan-17 | 35.249 | 34.897 | 35.249 | |
| 27-Jan-17 | 35.394 | 35.04 | 35.394 | |
| 30-Jan-17 | 35.353 | 34.999 | 35.353 | |
| 31-Jan-17 | 35.118 | 34.767 | 35.118 | |
| 1-Feb-17 | 35.731 | 35.374 | 35.731 | |
| | | | | |

35.499

35.67

35.854

35.76

35.662

35.583

35.538

35.406

35.182

34.825

34.993

35.175

35.858

36.03

36.216

36.121

36.022

35.942

35.897

35.764

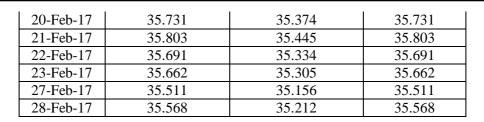
35.537

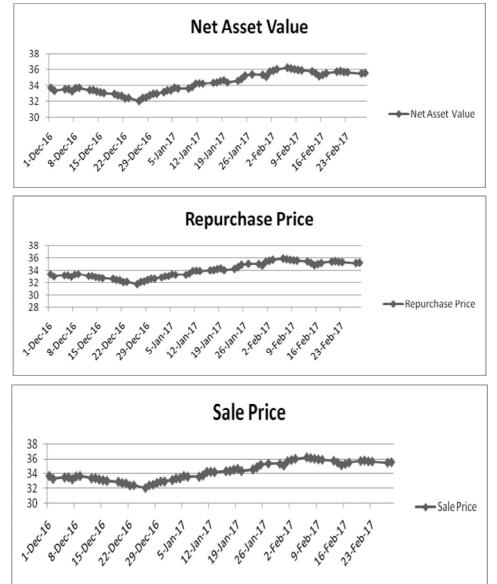
35.177

35.346

35.53

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INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that DSP Black Rock Balanced Fund - Direct Plan - Dividend has highest NAV on 6th Feb 2017 i.e. 36.216 and highest repurchase is 35.85and highest sale is 36.216

| DSP Black Rock Balanced Fund - Direct Plan - Growth | | | | |
|---|-----------------|-------------------------|------------|--|
| NAV date | Net Asset Value | Repurchase Price | Sale Price | |
| 1-Dec-16 | 124.508 | 123.263 | 124.508 | |
| 2-Dec-16 | 123.15 | 121.919 | 123.15 | |
| 5-Dec-16 | 123.798 | 122.56 | 123.798 | |
| 6-Dec-16 | 123.855 | 122.616 | 123.855 | |
| 7-Dec-16 | 122.946 | 121.717 | 122.946 | |
| 8-Dec-16 | 124.298 | 123.055 | 124.298 | |
| 9-Dec-16 | 124.492 | 123.247 | 124.492 | |
| 12-Dec-16 | 123.421 | 122.187 | 123.421 | |

| DSP Black Rock Balanced Fund - Direct Plan - Growth | DSP | Black | Rock | Balanced | Fund · | - Direct | Plan - | Growth |
|---|-----|-------|------|-----------------|--------|----------|--------|--------|
|---|-----|-------|------|-----------------|--------|----------|--------|--------|

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132.444

133.08

133.765

133.417

133.051

132.755

132.586

132.095

131.259

129.928

130.554

131.231

131.976

132.241

131.827

131.721

131.161

131.372

3-Feb-17

6-Feb-17

7-Feb-17

8-Feb-17

9-Feb-17

10-Feb-17

13-Feb-17

14-Feb-17

15-Feb-17

16-Feb-17

17-Feb-17

20-Feb-17

21-Feb-17

22-Feb-17

23-Feb-17

27-Feb-17

28-Feb-17

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13-Dec-16 14-Dec-16 15-Dec-16 16-Dec-16 19-Dec-16 20-Dec-16 21-Dec-16 22-Dec-16 23-Dec-16 26-Dec-16 27-Dec-16 28-Dec-16 29-Dec-16 30-Dec-16 31-Dec-16 2-Jan-17 3-Jan-17 4-Jan-17 5-Jan-17 6-Jan-17 9-Jan-17 10-Jan-17 11-Jan-17 12-Jan-17 13-Jan-17 16-Jan-17 17-Jan-17 18-Jan-17 19-Jan-17 20-Jan-17 23-Jan-17 24-Jan-17 25-Jan-17 27-Jan-17 30-Jan-17 31-Jan-17 1-Feb-17 2-Feb-17

| nber, 2017 | | | |
|------------|---------|---------|--|
| 123.47 | 122.235 | 123.47 | |
| 122.824 | 121.596 | 122.824 | |
| 122.447 | 121.223 | 122.447 | |
| 122.097 | 120.876 | 122.097 | |
| 121.692 | 120.475 | 121.692 | |
| 121.003 | 119.793 | 121.003 | |
| 120.827 | 119.619 | 120.827 | |
| 119.702 | 118.505 | 119.702 | |
| 119.882 | 118.683 | 119.882 | |
| 118.496 | 117.311 | 118.496 | |
| 119.846 | 118.648 | 119.846 | |
| 120.129 | 118.928 | 120.129 | |
| 121.054 | 119.843 | 121.054 | |
| 121.792 | 120.574 | 121.792 | |
| 121.794 | 120.576 | 121.794 | |
| 122.517 | 121.292 | 122.517 | |
| 123.317 | 122.084 | 123.317 | |
| 123.364 | 122.13 | 123.364 | |
| 124.512 | 123.267 | 124.512 | |
| 124.137 | 122.896 | 124.137 | |
| 124.131 | 122.89 | 124.131 | |
| 124.854 | 123.605 | 124.854 | |
| 126.48 | 125.215 | 126.48 | |
| 126.573 | 125.307 | 126.573 | |
| 126.46 | 125.195 | 126.46 | |
| 126.846 | 125.578 | 126.846 | |
| 127.019 | 125.749 | 127.019 | |
| 127.628 | 126.352 | 127.628 | |
| 128.032 | 126.752 | 128.032 | |
| 126.993 | 125.723 | 126.993 | |
| 127.746 | 126.469 | 127.746 | |
| 128.727 | 127.44 | 128.727 | |
| 130.195 | 128.893 | 130.195 | |
| 130.731 | 129.424 | 130.731 | |
| 130.579 | 129.273 | 130.579 | |
| 129.71 | 128.413 | 129.71 | |
| 131.975 | 130.655 | 131.975 | |
| | | | |

131.12

131.749

132.427

132.083

131.72

131.427

131.26

130.774

129.946

128.629

129.248

129.919

130.656

130.919

130.509

130.404

129.849

130.058

| 121.005 | |
|---------|--|
| 120.827 | |
| 119.702 | |
| 119.882 | |
| 118.496 | |
| 119.846 | |
| 120.129 | |
| 121.054 | |
| 121.792 | |
| 121.794 | |
| 122.517 | |
| 123.317 | |

132.444

133.08

133.765

133.417

133.051

132.755

132.586

132.095

131.259

129.928

130.554

131.231

131.976

132.241

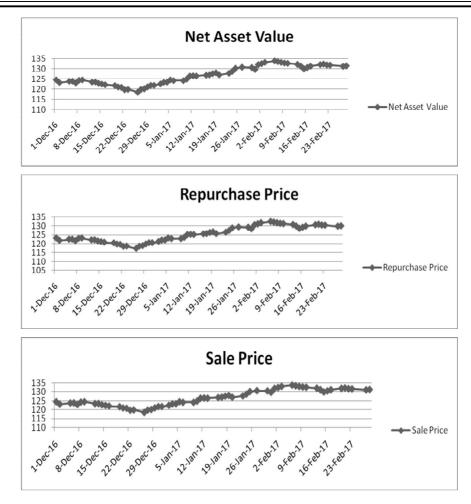
131.827

131.721

131.161

131.372

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INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that DSP Black Rock Balanced Fund - Direct Plan – Growth has highest NAV on 6th Feb 2017 i.e. 133.765 and highest repurchase is 132.427 and highest sale is 133.765

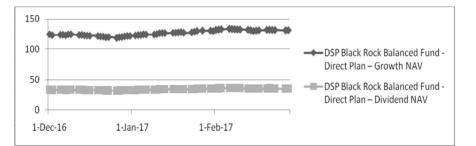
| Comparison of NAV of DSP Black Rock Balanced Fund - Direct Plan – Growth & DSP Black Rock |
|---|
| Balanced Fund - Direct Plan – Dividend |

| NAV date | DSP Black Rock Balanced Fund - Direct Plan – Growth NAV | DSP Black Rock Balanced Fund - Direct Plan – Dividend NAV |
|-----------|--|--|
| 1-Dec-16 | 124.508 | 33.709 |
| 2-Dec-16 | 123.15 | 33.342 |
| 5-Dec-16 | 123.798 | 33.517 |
| 6-Dec-16 | 123.855 | 33.533 |
| 7-Dec-16 | 122.946 | 33.286 |
| 8-Dec-16 | 124.298 | 33.653 |
| 9-Dec-16 | 124.492 | 33.705 |
| 12-Dec-16 | 123.421 | 33.415 |
| 13-Dec-16 | 123.47 | 33.428 |
| 14-Dec-16 | 122.824 | 33.254 |
| 15-Dec-16 | 122.447 | 33.151 |
| 16-Dec-16 | 122.097 | 33.057 |
| 19-Dec-16 | 121.692 | 32.947 |
| 20-Dec-16 | 121.003 | 32.76 |
| 21-Dec-16 | 120.827 | 32.713 |
| 22-Dec-16 | 119.702 | 32.408 |
| 23-Dec-16 | 119.882 | 32.457 |
| 26-Dec-16 | 118.496 | 32.082 |

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| 27-Dec-16 | 119.846 | 32.447 |
|-----------|---------|--------|
| 28-Dec-16 | 120.129 | 32.524 |
| 29-Dec-16 | 121.054 | 32.774 |
| 30-Dec-16 | 121.792 | 32.974 |
| 31-Dec-16 | 121.794 | 32.975 |
| 2-Jan-17 | 122.517 | 33.17 |
| 3-Jan-17 | 123.317 | 33.387 |
| 4-Jan-17 | 123.364 | 33.4 |
| 5-Jan-17 | 124.512 | 33.711 |
| 6-Jan-17 | 124.137 | 33.609 |
| 9-Jan-17 | 124.131 | 33.607 |
| 10-Jan-17 | 124.854 | 33.803 |
| 11-Jan-17 | 126.48 | 34.243 |
| 12-Jan-17 | 126.573 | 34.269 |
| 13-Jan-17 | 126.46 | 34.238 |
| 16-Jan-17 | 126.846 | 34.342 |
| 17-Jan-17 | 127.019 | 34.389 |
| 18-Jan-17 | 127.628 | 34.554 |
| 19-Jan-17 | 128.032 | 34.663 |
| 20-Jan-17 | 126.993 | 34.382 |
| 23-Jan-17 | 127.746 | 34.586 |
| 24-Jan-17 | 128.727 | 34.852 |
| 25-Jan-17 | 130.195 | 35.249 |
| 27-Jan-17 | 130.731 | 35.394 |
| 30-Jan-17 | 130.579 | 35.353 |
| 31-Jan-17 | 129.71 | 35.118 |
| 1-Feb-17 | 131.975 | 35.731 |
| 2-Feb-17 | 132.444 | 35.858 |
| 3-Feb-17 | 133.08 | 36.03 |
| 6-Feb-17 | 133.765 | 36.216 |
| 7-Feb-17 | 133.417 | 36.121 |
| 8-Feb-17 | 133.051 | 36.022 |
| 9-Feb-17 | 132.755 | 35.942 |
| 10-Feb-17 | 132.586 | 35.897 |
| 13-Feb-17 | 132.095 | 35.764 |
| 14-Feb-17 | 131.259 | 35.537 |
| 15-Feb-17 | 129.928 | 35.177 |
| 16-Feb-17 | 130.554 | 35.346 |
| 17-Feb-17 | 131.231 | 35.53 |
| 20-Feb-17 | 131.976 | 35.731 |
| 21-Feb-17 | 132.241 | 35.803 |
| 22-Feb-17 | 131.827 | 35.691 |
| 23-Feb-17 | 131.721 | 35.662 |
| 27-Feb-17 | 131.161 | 35.511 |
| 28-Feb-17 | 131.372 | 35.568 |
| | | |



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INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that DSP Black Rock Balanced Fund - Direct Plan – Growth has highest NAV than DSP Black Rock Balanced Fund - Direct Plan – Dividend

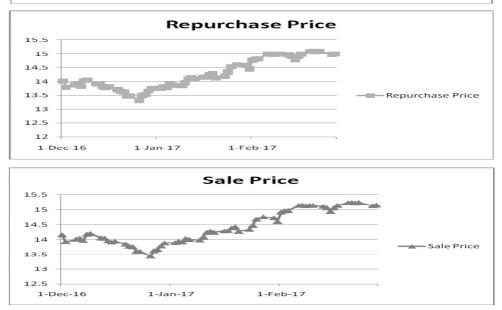
| Axis Equity Fund - Direct Plan – Dividend | | | | |
|---|-----------------|------------------|------------|--|
| NAV date | Net Asset Value | Repurchase Price | Sale Price | |
| 1-Dec-16 | 14.16 | 14.02 | 14.16 | |
| 2-Dec-16 | 13.93 | 13.79 | 13.93 | |
| 5-Dec-16 | 14.02 | 13.88 | 14.02 | |
| 6-Dec-16 | 14.05 | 13.91 | 14.05 | |
| 7-Dec-16 | 13.97 | 13.83 | 13.97 | |
| 8-Dec-16 | 14.18 | 14.04 | 14.18 | |
| 9-Dec-16 | 14.2 | 14.06 | 14.2 | |
| 12-Dec-16 | 14.06 | 13.92 | 14.06 | |
| 13-Dec-16 | 14.05 | 13.91 | 14.05 | |
| 14-Dec-16 | 13.96 | 13.82 | 13.96 | |
| 15-Dec-16 | 13.92 | 13.78 | 13.92 | |
| 16-Dec-16 | 13.95 | 13.81 | 13.95 | |
| 19-Dec-16 | 13.85 | 13.71 | 13.85 | |
| 20-Dec-16 | 13.78 | 13.64 | 13.78 | |
| 21-Dec-16 | 13.76 | 13.62 | 13.76 | |
| 22-Dec-16 | 13.61 | 13.47 | 13.61 | |
| 23-Dec-16 | 13.61 | 13.47 | 13.61 | |
| 26-Dec-16 | 13.45 | 13.32 | 13.45 | |
| 27-Dec-16 | 13.63 | 13.49 | 13.63 | |
| 28-Dec-16 | 13.67 | 13.53 | 13.67 | |
| 29-Dec-16 | 13.79 | 13.65 | 13.79 | |
| 30-Dec-16 | 13.89 | 13.75 | 13.89 | |
| 2-Jan-17 | 13.9 | 13.76 | 13.9 | |
| 3-Jan-17 | 13.95 | 13.81 | 13.95 | |
| 4-Jan-17 | 13.92 | 13.78 | 13.92 | |
| 5-Jan-17 | 14.04 | 13.9 | 14.04 | |
| 6-Jan-17 | 14.01 | 13.87 | 14.01 | |
| 9-Jan-17 | 13.99 | 13.85 | 13.99 | |
| 10-Jan-17 | 14.09 | 13.95 | 14.09 | |
| 11-Jan-17 | 14.24 | 14.1 | 14.24 | |
| 12-Jan-17 | 14.28 | 14.14 | 14.28 | |
| 13-Jan-17 | 14.24 | 14.1 | 14.20 | |
| 16-Jan-17 | 14.29 | 14.15 | 14.29 | |
| 17-Jan-17 | 14.3 | 14.16 | 14.3 | |
| 18-Jan-17 | 14.39 | 14.25 | 14.39 | |
| 19-Jan-17 | 14.43 | 14.29 | 14.43 | |
| 20-Jan-17 | 14.27 | 14.13 | 14.27 | |
| 23-Jan-17 | 14.34 | 14.2 | 14.34 | |
| 23-Jan-17 24-Jan-17 | 14.48 | 14.34 | 14.48 | |
| 25-Jan-17 | 14.68 | 14.53 | 14.68 | |
| 27-Jan-17 | 14.76 | 14.61 | 14.08 | |
| 30-Jan-17 | 14.73 | 14.58 | 14.73 | |
| 31-Jan-17 | 14.6 | 14.45 | 14.6 | |
| 1-Feb-17 | 14.92 | 14.77 | 14.92 | |
| 2-Feb-17 | 14.92 | 14.81 | 14.96 | |
| 3-Feb-17 | 14.90 | 14.82 | 14.90 | |
| 6-Feb-17 | 15.14 | 14.82 | 15.14 | |
| 7-Feb-17 | 15.15 | 14.99 | 15.14 | |
| 8-Feb-17 | 15.13 | 14.98 | 15.13 | |
| 0-1.00-1/ | 15.15 | 14.70 | 13.13 | |

Axis Equity Fund - Direct Plan – Dividend

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| 9-Feb-17 | 15.14 | 14.99 | 15.14 |
|-----------|-------|-------|-------|
| 10-Feb-17 | 15.14 | 14.99 | 15.14 |
| 13-Feb-17 | 15.11 | 14.96 | 15.11 |
| 14-Feb-17 | 15.06 | 14.91 | 15.06 |
| 15-Feb-17 | 14.94 | 14.79 | 14.94 |
| 16-Feb-17 | 15.06 | 14.91 | 15.06 |
| 17-Feb-17 | 15.14 | 14.99 | 15.14 |
| 20-Feb-17 | 15.23 | 15.08 | 15.23 |
| 21-Feb-17 | 15.24 | 15.09 | 15.24 |
| 22-Feb-17 | 15.22 | 15.07 | 15.22 |
| 23-Feb-17 | 15.24 | 15.09 | 15.24 |
| 27-Feb-17 | 15.13 | 14.98 | 15.13 |
| 28-Feb-17 | 15.15 | 15 | 15.15 |





INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that Axis Equity Fund - Direct Plan – Dividend has highest NAV on 21st Feb 2017 & 23rd Feb 2017 i.e. 15.24 and highest repurchase is 15.09 and highest sale is 15.24

| NAV date | Net Asset Value | Repurchase Price | Sale Price |
|----------|-----------------|------------------|------------|
| 1-Dec-16 | 19.57 | 19.37 | 19.57 |
| 2-Dec-16 | 19.25 | 19.06 | 19.25 |
| 5-Dec-16 | 19.37 | 19.18 | 19.37 |
| 6-Dec-16 | 19.42 | 19.23 | 19.42 |
| 7-Dec-16 | 19.31 | 19.12 | 19.31 |
| 8-Dec-16 | 19.6 | 19.4 | 19.6 |
| 9-Dec-16 | 19.63 | 19.43 | 19.63 |

Axis Equity Fund - Direct Plan – Growth

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| - S. July Sept | | | |
|--------------------|-------|-------|-------|
| 12-Dec-16 | 19.42 | 19.23 | 19.42 |
| 13-Dec-16 | 19.41 | 19.22 | 19.41 |
| 14-Dec-16 | 19.29 | 19.1 | 19.29 |
| 15-Dec-16 | 19.24 | 19.05 | 19.24 |
| 16-Dec-16 | 19.28 | 19.09 | 19.28 |
| 19-Dec-16 | 19.14 | 18.95 | 19.14 |
| 20-Dec-16 | 19.04 | 18.85 | 19.04 |
| 21-Dec-16 | 19.02 | 18.83 | 19.02 |
| 22-Dec-16 | 18.8 | 18.61 | 18.8 |
| 23-Dec-16 | 18.8 | 18.61 | 18.8 |
| 26-Dec-16 | 18.59 | 18.4 | 18.59 |
| 27-Dec-16 | 18.84 | 18.65 | 18.84 |
| 28-Dec-16 | 18.89 | 18.7 | 18.89 |
| 29-Dec-16 | 19.05 | 18.86 | 19.05 |
| 30-Dec-16 | 19.19 | 19 | 19.19 |
| 2-Jan-17 | 19.21 | 19.02 | 19.21 |
| 3-Jan-17 | 19.28 | 19.09 | 19.28 |
| 4-Jan-17 | 19.23 | 19.04 | 19.23 |
| 5-Jan-17 | 19.41 | 19.22 | 19.41 |
| 6-Jan-17 | 19.36 | 19.17 | 19.36 |
| 9-Jan-17 | 19.34 | 19.15 | 19.34 |
| 10-Jan-17 | 19.47 | 19.28 | 19.47 |
| 11-Jan-17 | 19.68 | 19.48 | 19.68 |
| 12-Jan-17 | 19.74 | 19.54 | 19.74 |
| 13-Jan-17 | 19.68 | 19.48 | 19.68 |
| 16-Jan-17 | 19.75 | 19.55 | 19.75 |
| 17-Jan-17 | 19.77 | 19.57 | 19.77 |
| 18-Jan-17 | 19.89 | 19.69 | 19.89 |
| 19-Jan-17 | 19.93 | 19.73 | 19.93 |
| 20-Jan-17 | 19.72 | 19.52 | 19.72 |
| 23-Jan-17 | 19.82 | 19.62 | 19.82 |
| 24-Jan-17 | 20.01 | 19.81 | 20.01 |
| 25-Jan-17 | 20.29 | 20.09 | 20.29 |
| 27-Jan-17 | 20.39 | 20.19 | 20.39 |
| 30-Jan-17 | 20.36 | 20.16 | 20.36 |
| 31-Jan-17 | 20.17 | 19.97 | 20.17 |
| 1-Feb-17 | 20.62 | 20.41 | 20.62 |
| 2-Feb-17 | 20.67 | 20.46 | 20.67 |
| 3-Feb-17 | 20.69 | 20.48 | 20.69 |
| 6-Feb-17 | 20.92 | 20.71 | 20.92 |
| 7-Feb-17 | 20.94 | 20.73 | 20.94 |
| 8-Feb-17 | 20.91 | 20.7 | 20.91 |
| 9-Feb-17 | 20.91 | 20.7 | 20.91 |
| 10-Feb-17 | 20.92 | 20.71 | 20.92 |
| | | | |

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| 13-Feb-17 | 20.89 | 20.68 | 20.89 |
|-----------|-------|-------|-------|
| 14-Feb-17 | 20.81 | 20.6 | 20.81 |
| 15-Feb-17 | 20.65 | 20.44 | 20.65 |
| 16-Feb-17 | 20.8 | 20.59 | 20.8 |
| 17-Feb-17 | 20.92 | 20.71 | 20.92 |
| 20-Feb-17 | 21.04 | 20.83 | 21.04 |
| 21-Feb-17 | 21.06 | 20.85 | 21.06 |
| 22-Feb-17 | 21.04 | 20.83 | 21.04 |
| 23-Feb-17 | 21.06 | 20.85 | 21.06 |
| 27-Feb-17 | 20.9 | 20.69 | 20.9 |
| 28-Feb-17 | 20.94 | 20.73 | 20.94 |





INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that Axis Equity Fund - Direct Plan – Growth has highest NAV on 21st Feb 2017 & 23rd Feb 2017 i.e. 21.06 and highest repurchase is 20.85 and highest sale is 21.06

| Comparison of NAV of Axis Equity Fund | - Direct Plan – Dividend | l & Axis Equity Fund | - Direct Plan – |
|---------------------------------------|--------------------------|----------------------|-----------------|
| | Growth | | |

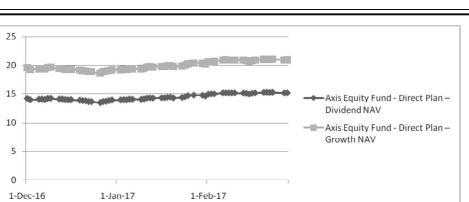
| Growth | | |
|-----------|--|--|
| NAV date | Axis Equity Fund - Direct Plan – Dividend NAV | Axis Equity Fund - Direct Plan – Growth NAV |
| 1-Dec-16 | 14.16 | 19.57 |
| 2-Dec-16 | 13.93 | 19.25 |
| 5-Dec-16 | 14.02 | 19.37 |
| 6-Dec-16 | 14.05 | 19.42 |
| 7-Dec-16 | 13.97 | 19.31 |
| 8-Dec-16 | 14.18 | 19.6 |
| 9-Dec-16 | 14.2 | 19.63 |
| 12-Dec-16 | 14.06 | 19.42 |
| 13-Dec-16 | 14.05 | 19.41 |
| 14-Dec-16 | 13.96 | 19.29 |
| 15-Dec-16 | 13.92 | 19.24 |

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| 28-Dec-1613.6718.8929-Dec-1613.7919.0530-Dec-1613.8919.192-Jan-1713.919.213-Jan-1713.9519.284-Jan-1713.9219.235-Jan-1714.0419.416-Jan-1714.0119.369-Jan-1714.0919.4711-Jan-1714.2419.6812-Jan-1714.2819.7413-Jan-1714.2919.7517-Jan-1714.2919.7517-Jan-1714.319.7718-Jan-1714.3919.8919-Jan-1714.3419.8220-Jan-1714.3419.8220-Jan-1714.4319.8224-Jan-1714.4420.0125-Jan-1714.7320.3631-Jan-1714.6620.171-Feb-1714.9720.622-Feb-1714.9720.696-Feb-1715.1420.927-Feb-1715.1420.927-Feb-1715.1420.9213-Feb-1715.1420.9214-Feb-1715.1420.9215-Feb-1715.1420.9215-Feb-1715.1420.9216-Feb-1715.1420.9217-Feb-1715.1420.9220-Feb-1715.1420.9221-Feb-1715.1420.9222-Feb-1715.2221.0423-Feb-1715.2421.0622-Feb-1715.2421.0622-Feb- | 26-Dec-16 | 13.45 | 18.59 |
| 29-Dec-1613.7919.0530-Dec-1613.8919.192-Jan-1713.9519.213-Jan-1713.9219.235-Jan-1714.0419.416-Jan-1714.0019.369-Jan-1714.0919.4711-Jan-1714.0919.4711-Jan-1714.2419.6812-Jan-1714.2919.7413-Jan-1714.2919.7413-Jan-1714.2919.7517-Jan-1714.2919.7517-Jan-1714.319.7718-Jan-1714.3919.8919-Jan-1714.3419.8220-Jan-1714.3419.8223-Jan-1714.4319.8224-Jan-1714.44820.0125-Jan-1714.6620.2927-Jan-1714.7320.3631-Jan-1714.620.171-Feb-1714.9620.673-Fab-1715.1420.927-Feb-1715.1420.927-Feb-1715.1420.9213-Feb-1715.1420.9214-Feb-1715.1420.9215-Feb-1715.1420.9214-Feb-1715.1420.9215-Feb-1715.1420.9215-Feb-1715.1420.9220-Feb-1715.1420.9220-Feb-1715.1420.9220-Feb-1715.2221.0421-Feb-1715.2421.0622-Feb-1715.2421.0622-F | 27-Dec-16 | 13.63 | 18.84 |
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| 13.1 14.39 19.89 19.1 14.39 19.89 19.1 14.43 19.93 20.1 14.27 19.72 23.1 14.27 19.72 23.1 14.34 19.82 24.1 14.48 20.01 25.1 14.48 20.29 27.1 14.68 20.29 27.1 14.76 20.39 30.1 14.73 20.36 31.1 14.73 20.62 2.7 2.62 2.62 2.7 14.92 20.62 2.7 14.97 20.69 6.7 14.97 20.69 6.7 15.14 20.92 7.7 15.14 20.92 7.7 15.15 20.94 8.7 15.14 20.91 9.7 15.14 20.92 13.7 15.14 20.92 13.7 15.10 20.89 14.7 15.06 | 16-Jan-17 | 14.29 | 19.75 |
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INTERPRETATION

From the above graph and table of three months data i.e. 01st December 2016 to 28th February 2017, we can state that Axis Equity Fund - Direct Plan – Growth has highest NAV than Axis Equity Fund - Direct Plan – Dividend

CONCLUSION

In every organization proper technology has to be adopted so as to meet market conditions and we can make a clear observation that Franklin in India is clearly making a growing stage and the company need to mobile the funds in a proper way and the funds should also be used to get mobilized in rural region, the reason behind that is rural market is potential market for many companies and can generate a huge amount of profits and at the end a good transparency has to be maintained.

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GREEN MARKETING: AN EMERGING SUSTAINABLE PRACTICE IN HOTELS OF SHILLONG, MEGHALAYA

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ABSTRACT

Green marketing is an emerging concept and gripping attention these days at a global level. It requires consumers who voluntarily support clean and hygienic environment and are willing to pay for the same. It is very difficult for all the organizations to escort the eco-marketing revolution to have a successful era. Green marketing involves all the activities designed to define, generate and facilitate any exchanges so that they can satisfy human needs easily, such that satisfaction of these needs and wants occur with minimal impact on the natural environment. Businesses which are trying to join eco-tourism are verified by a qualified grading advisor against a set of criteria, covering a range of areas, like energy and water efficiency, waste management, biodiversity and much more in hotels. Many organizations are initiating this fact that they are members of this wider community and so behave in an environmentally responsible trend. This fact gave an insight to the organizations that they must attain environmental objectives and goals as well as profitable objectives.

The conflict between sustainable development ideas and over-exploitation of the natural resources for economic gains has been going on for last few decades. In this case, tourism is one of the human activities that have unique and significant impacts on the environment. The tourism industry has negative environmental impact has threatened both cultural and natural resources in the destination areas and this has led to the evolution of new perspectives of tourism. While this behaviour has a competitive advantage, the organization was set specifically and scientifically to offer customers environmentally responsible and safe alternatives or options to conventional cosmetic products. This research paper focuses on the successful implementation of Green marketing and utilization of eco-friendly products in hotels or any tourism allied industry in Shillong, Meghalaya.

Keywords: Green Marketing, Sustainability, Eco-friendly, Bio-diversity

INTRODUCTION

With the increase in the technology and advancements in the living style of the human being, there has been a drastic change in the environment. Moreover, the irresponsible human behaviour and activities have taken a toll on the environment and have resulted in negative impacts like global warming, greenhouse effect, floods and sudden climatic variations. But off lately the society has started realising and have become more concerned towards the natural environment and even the business world has started to modify their behaviour in an endeavour to address societies 'new concerns 'and the concept of "Green Marketing" is an innovation for one such concern.

The concept of "green marketing" emerged in the late 1980s. Green Marketing describes an organization's efforts at designing, promoting, pricing and distributing products that will not harm the environment. It has been defined as the management process responsible for identifying, anticipating and satisfying the requirements of customers and society in a profitable and sustainable way (Chan, E.S.W., 2013) In a nutshell we can summarize that, Green Marketing is the marketing of products that are supposed to be environmentally safe & can help in preserving our environment. Consequently, green marketing encourages us to carry a variety of acts like product modification, process & packaging modification, as well modifications in advertising. But all the modifications revolve around one common agenda of promoting awareness about safeguarding our environment. A new green marketing phenomenon targets what the industry calls LOHAS or "Lifestyles of Health and Sustainability," they represent the consumers that base their decisions on socially responsible and sustainable living. The most apparent thing about green thinking is its age. There is little or no literature available before the 1990's that refers to 'green', suggesting that as a concept green marketing is very young. However, this does not mean that green thinking has not evolved through time. Green issues are a mixture of different philosophies that have arisen over centuries (Peattie., 1992) and this is certainly shown in the literature, despite not using 'green' as a term, there has been work on the development of industries and the pros and cons of this. This relates to ideas that contemporary environmentalism is a result of growing concerns over consumption and production, which began in the 1960's and70's. (Wasik, 1996) suggests that the early development of green issues are to do with a quiet and yet powerful shift in institutional thinking; a "growing

relationship between ecology and economics". The awareness of the environment and consumption raises the issue of behavioural change, with guests taking responsibility for the effect they have on the environment by changing their ways and practicing the environmental lifestyles.(*Halkier*, 1999)

ABOUT MEGHALAYA

'Meghalaya' derived from Sanskrit, means the 'Abode of the Clouds' was declared as a full- fledged 21st state of the Indian Union on January 21st, 1972. The physical feature of Meghalaya is well defined in three different regions - the Khasi Hills in the Central part of Meghalaya, Jaintia Hills in the eastern part of Meghalaya and Garo Hills which form the western part of Meghalaya . The population of Meghalaya state is 2,966,889. The population density of Meghalaya state is 132 per sq km and the state is spread over 22,429 Sq Km.

RESEARCH QUESTIONS

RQ1. What is the concept of Green Marketing?

RQ2. What role does Green marketing plays in sustainable development?

RQ3. What may be the strategies of the hotels for sustainable development?

OBJECTIVES

The objectives of the proposed study are as follows:

- i) To study the concept of "Green Marketing".
- ii) To find out the role of Green Marketing as a means for sustainable development.
- iii) To suggest various sustainable strategies for the hotels in Shillong.

RESEARCH METHODOLOGY

The study has been carried out in Shillong which is the capital of Meghalaya. This paper is based on qualitative research techniques where an exploratory research approach has been applied. In this regard, personal visits and survey of Classified Hotels and Restaurants have been done to observe the existing green marketing practices adopted for the sustainable development. Secondary data has been collected from reputed journals of tourism research, books, travel magazines, national and local newspapers, annual reports of Ministry of Tourism, Government of India, Meghalaya Tourism, etc.

GREEN MARKETING AND SUSTAINABLE DEVELOPMENT

Origin and Development: The term Green Marketing came into existence in the late 1980s and early 1990s. The American Marketing Association (AMA) organised the first workshop on "Ecological Marketing" in 1975. The proceedings of this workshop resulted in one of the first book on green marketing entitled "Ecological Marketing". Two tangible milestones for green marketing came in the form of published books, both of which were called Green Marketing. They were by Ken Peattie (1992), in the United Kingdom and by Jacquelyn A. Ottman (2011), in the United States of America.

SCOPE OF GREEN MARKETING

The concept of green marketing is constantly gaining importance due to the keen concerns of people and government of different countries in environment safety. The following are some of the key features of the Green Marketing:

- Green Marketing ensures sustained long -term profitable environment;
- It is cost effective and helps in saving funds for the future, though the initial cost is more;
- It encourages customers to actively contribute towards sustainability and be a part of "Go Green Drive";
- It helps the organisation to develop the sense of environmental responsibility and market their products through a sustainable approach.

GREEN MARKETING AND SUSTAINABLE DEVELOPMENT

The sustainable development can be conceptually broken into three components: environmental sustainability, socio political sustainability and economic sustainability. The two terms sustainable development and sustainable consumption are the two facets of the same coin. Sustainable development refers to maintaining long term economic, social and environmental capital. Whereas sustainable consumption becomes the way of life. Sustainable consumption is using resources in such a way so that it minimizes harm to the environment while supporting the well-being of people. Green Marketing can be viewed both as a type of marketing philosophy and a marketing process. As a philosophy, green marketing runs parallel to the community marketing concept and espouses the view that satisfying customers is not enough and marketers should take into

account ecological interests of the society as a whole. As a marketing process, it is like industrial or service marketing, and is concerned with the marketing of green products and positioning them as green brands. Green marketing concept emerges from societal marketing (Kotler, Keller, Koshy, & Jha, 2009). So we can easily conclude that Green Marketing effectively supports in resolving the conflict between the various competing goals and the simultaneous pursuit of economic prosperity, environmental quality and social equity, the three pillars of Sustainability.

WHY "GOING GREEN"?

Few of those possible reasons why the organisations are enhancing the use of green marketing and supporting to GO GREEN are:

- Organisations generally perceive Green Marketing to be an opportunity that can be used to attain its objective(Keller,1987 and Shearer,1990);
- Organizations believe they have moral obligation to be more socially responsible(Davis 1992,Keller ,1987,McIntosh, 1990)
- Government bodies are forcing firms to become more and more responsible (NAAG,1990);
- Cost factors associated with waste disposal or reductions in material usage forces firms to modify their behaviour (Azzone and Manzini,1994).

STRATEGIES FOR THE GREEN MARKETING

Even though identifying Green guests can be challenging for hotels but Hotels are trying to appeal green guests should practice targeted marketing that draws on both functional and emotional green images. While industry research has revealed a substantial proportion of hotel guests prefer to stay in a hotel that cares about the environment, guests are not always that predictable. A study by a major national hotel operation found the opposite and 75 percent of their guest respondents held they wouldn't give up daily hotel room service facilities. The study also found guests pay less attention to the environment while traveling because they're not directly responsible for the costs of cleaning and utilities. Green guests lean towards being more worried about others and have a higher tendency to work for the good of society, unlike non-green guests. Green guests also place a higher value on the restraint of actions that could upset or harm others and violate social norms; and they're less likely purchase self-serving products such as those associated with achievement or success, according to the analysis. Hotels develop a green placement strategy targeted at green guests that draw on both functional and emotional images. For example, green guests look for tangible, functional images such as a recycling program or a LEED certification. They'll also look for actions that illustrate a hotel's commitment to the environment, such as a menu that offer food supplied by local farmers. It is very clear that it is almost impossible for hotels alone to implement such measures without cooperation from customers. In this regard, hotels should encourage environmentally responsible behaviour among its customers and help them believe that the collective efforts they are indulging in are good for everybody. The balance between consumer expectations and green practices could prove highly beneficial.

CHARACTERISTICS OF GREEN PRODUCTS

- 1. Products those are originally grown.
- 2. Products those are recyclable, reusable and biodegradable.
- 3. Products made up of natural ingredients.
- 4. Products containing recycled contents and non- toxic chemical.
- 5. Products contents under approved chemicals.
- 6. Products that do not harm or pollute the environment.
- 7. Products that will not be tested on animals.
- 8. Products that have eco-friendly packaging i.e. reusable, refillable containers etc.

GOLDEN RULES OF GREEN MARKETING

- 1. Know your Customer: Make sure that the customer is aware of and are concerned about the issues that your product attempts to address.
- 2. Educating your customers: It is not just a matter of raising the awareness, whatever you're doing is to protect the environment, but also a matter of educating them to know why it matters.
- 3. Being Genuine & Transparent: It means that a) You are actually doing what you claim to be doing in your green marketing campaign and b) The rest of your business policies are consistent with whatever you are doing that's environment -friendly.

- 4. Reassure the Buyer: Consumers must be taken into confidence regarding the quality of product and it has not been compromised in the name of the environment.
- 5. Consider Your Pricing: If you are charging a premium for your product and many environmentally preferable products cost more due to economies of scale and use of higher-quality ingredients make sure those consumers can afford the premium and feel it's worth it. **Countries ranked according to their response level**:

| Rank | Countries |
|------|--------------------------|
| 1 | India |
| 2 | United Kingdom |
| 3 | United States of America |
| 4 | Thailand |
| 5 | Australia |
| 6 | Canada |
| 7 | China |
| | |

Table-1 Countries ranked according to their response level on Green Marketing

Source - Namex International Journal of Management Research

10 EASY WAYS TO GO GREEN

- 1. Unplug the electrical appliances when not in use.
- 2. Use water judiciously, every drop counts.
- 3. Switch to compact fluorescent light and LED bulbs.
- 4. Buy products with less packaging.
- 5. Buy organic and local food.
- 6. Drive the vehicles that save fuel.
- 7. Walk more.
- 8. Proper garbage disposal.

PROSPECTS AND CHALLENGES OF GREEN MARKETING

There are many challenges associated with Green Marketing. The major out of those is the prejudiced perception regarding the judgement of drawing a relationship between improved environment quality and customer satisfaction. Also, there are few misconceptions that the green products/services are far expensive than conventional services. Another major challenge which is affecting green marketing is "Green washing". Hotels are gradually more recognizing the benefits of green marketing, but there is a thin line difference between doing so for its own benefit only and for social responsibility reasons. The term "Green washing" refers to all industries that adopt apparently green acts with a fundamental purpose to increase profits. The primary objective of green washing is to provide consumers with the feeling that the organization is taking the necessary steps to responsibly manage its ecological footprint. In reality, the company may be doing very little that is environmentally beneficial. These two problems should be tackled tactfully so that green marketing can get its real meaning and can achieve its real objectives(Chaudhary, Aparna.,& Gokarn, Samir,2013). Further challenges in green marketing in hotel industry include:

- Green products require renewable and recyclable material, which is costly.
- Requires a technology, which requires huge investment in Research & Development.
- Water treatment technology, which is too costly.
- Majority of the people are not aware of green products and their uses.
- Majority of the consumers are not willing to pay a premium for green products.

CONCLUSION AND RECOMMENDATIONS

The concept of Reduce, Reuse and Recycle should be given open arm awareness and encouragement. Witnessing the positive impacts of Green Marketing, the marketers need to confront and implement the same as a means of solution to rising environmental challenges. One should understand that green marketing is a means towards the broader goal of sustainable development. It implies a medium to long term policy strategy that understands and addresses potential poverty and resource scarcity gaps; provides opportunities for fostering alternate economic, production and livelihood models; and intends to protect development and growth prospects, as well as the impacts of environmental degradation. The key to successful green marketing is

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credibility. Never overstate environmental claims or establish unrealistic expectations, and communicate simply and through sources that people trust. Observing the recent trends in green marketing and getting its importance worldwide, it can be claimed that if sustainable development is the need of time then green marketing can fulfil this need and can become means for sustainable development as green marketing incorporates 3 P such as people, profit and planet all together.

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ROLE OF REFERENCE CHECK IN INDIAN ORGANIZATIONS- A STUDY

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ABSTRACT

Especially after several interactions on different occasions with a number of Personnel Managers of reputed organizations in last few years during the course of informal or unofficial meetings, it was learned by the Researcher that the job applicants do not attach adequate significance or weight-age to one of the sections of the Application Forms, namely, 'References.'

Invariably the section of 'References,' is located towards the fag end of the Application Form. Although the structure of this section differs from one organization to the other, the contents of the section remain, more or less the same. However, There exist various myths about 'References.'

The generic meaning of the word 'Reference' covers the details of those persons who know the candidate very well, preferably but not desirably over a long span of time. in the field of Personnel Management, the word 'Reference' strictly includes the references of previous employers and other professional personnel, as it is crystal clear from the findings of a few Research Papers in the field of Personnel Management.

A Personnel Manager should decide as to how much significance is to be attached to 'Reference Check' in the light of its relative merits as well as demerits.

In this Research Paper, there is an attempt on the part of the Researcher to convince the significance of the section of 'References,' in the Application Form. Also, some guidelines are given as to how to give such references so that there would not crop up any serious problem during the course of the interview or thereafter as regards this aspect.

Keywords: Validity of References Checking, Referral and Employee Turnover

RATIONALE OF THE RESEARCH PAPER

Especially after several interactions on different occasions with a number of Personnel Managers of reputed organizations in last few years during the course of informal or unofficial meetings, it was learned by the Researcher that the job applicants do not attach adequate significance or weight-age to one of the Sections of the Application Forms, namely, 'References.' This fact prompted the Researcher to develop better insight in this direction and check whether or not any Research Work is already carried out on this topic, also, whether or not it is actually essential to carry it forward on some other vital topic related to Research. After initiating the study on this line, it was felt by the Researcher that there exists a real need, at present, to develop acquaintance with the concept of 'Reference Check,' especially among fresh job applicants.

In this Research Paper, there is an attempt on the part of the Researcher to convince the significance of the section of 'References,' in the Application Form. Also, some guidelines are given as to how to give such references so that there would not crop up any serious problem during the course of the interview or thereafter as regards this aspect.

INTRODUCTION

Invariably the section of 'References,' is located towards the fag end of the Application Form. Although the structure of this section differs from one organization to the other, the contents of the section remain, more or less the same. It may not be out of place to point out over here that on different Web-sites and in the books on 'Personnel Management,' some structures for the section of 'References' are suggested, however, they are designed only as a guideline. In other words, it is not, at all, necessary to follow them strictly and technically as they stand in such books. They seem to be borrowed from some reputed organizations; still, there is an ample scope to improve them in order to design the best structure of the section of the 'References.'

REVIEW OF LITERATURE

As an outcome of several interactions on different occasions with a number of Personnel Managers of reputed organizations in last few years during the course of informal or unofficial meetings it was also realized by the Researcher that there exist various myths about 'References.' For example, 'There is, indeed, no need to undertake Research on the topic of 'References,' as it is relatively unimportant,' or 'No enthusiastic and enterprising Researcher would ever like to spend (not to invest) his precious time in conducting Research on a dismal topic like 'References,' or 'References, as a topic does not qualify the caliber of a Research topic,' etc.

However, after undertaking review of pertinent literature, it was understood that Research has already been carried out on the so called unimportant or dismal topic of 'References.'

In the Research Paper titled, 'Checking Applicant's References,' C. W. Brooks has commented that the use of References is common in most selection procedures, for it involves only a little time and money, and minimum of effort.

Furthermore, in the Research Paper titled, 'Validity of References Ratings from previous Employers,' R. C. Browning has stated that the opinions of previous employers and other professional personnel who actually know and recognize the candidate very well are useful and helpful in getting a picture of his potential performance in a particular job. On this basis, the recruiter or the employer gets a rough idea about past work profile and present official caliber of a candidate. Whenever such opinions are sought for 'it is important to get more than two viewpoints,' as it is suggested by A. N. Nash and S. G. Caroll in a Handbook at References Check.'

However, the observations made and reported by M. J. Cannon in the Journal of Applied Psychology in the Research Paper titled 'Sources of Referral and Employee turnover,' differ drastically and dramatically. 'Some Employers are of the opinion that references are useless because a referee rarely gives an unfavorable opinion about the applicant. But other employers consider reference-checking to be an integral part of the total over-all selection and assessment program.' Therefore, if the employers are not attaching sufficient significance to 'Reference Check,' and are treating it simply as an official formality, irrespective of the fact whether it is favorable or unfavorable for the candidate, it would not lead for a candidate to lose an opportunity to get shortlisted.

RESEARCH PAPER OBJECTIVE

The Research Paper Objective is as follows. 1. To Study the Role of Reference Check in Indian Organizations

RESEARCH PAPER METHODOLOGY

The Methodology adopted for writing the Research Paper is as follows.

1. The Research Paper is based on both Secondary Data and Primary Data. SOURCES OF SECONDARY DATA

The Secondary Data for the Research Paper is collected from a Book on the 'Personnel Management' and some

other significant Web-sites, the details about which are mentioned in the Section of 'Categorized Bibliography,' located at the end of the Research Paper.

SOURCES OF PRIMARY DATA

The Primary Data for the Research Paper is collected by the Researcher through adoption of Observation Methodology. The Observations are the outcomes of several interactions on different occasions with a number of Personnel Managers of reputed organizations in last few years during the course of informal or unofficial meetings,

2. Several inferences were arrived at and personal views were formed after applying logical interpretations in different situations.

MEANING OF THE WORD 'REFERENCES

After review of relevant literature of Personnel Management, it is learned that the word 'Reference Check' has a different meaning in the field of Personnel Management from that of its prevalent generic meaning. The generic meaning of the word 'Reference' covers the details of those persons who know the candidate very well, preferably but not desirably over a long span of time.

When a candidate fills in the Employment Form, as designed or structured by the organization, (the design of the Employment Form varies from organization to organization) in general, towards the end of the form there is a separate section that demands minimum two and maximum three references. In general, these references mean the details (Names, Designations, Addresses, E-mail-ids, Telephone Numbers, Mobile Numbers, etc.) of those persons who know the candidate very well, preferably but not desirably over a long span of time.

In the Employment Form of some organizations, in one of the clauses it is also mentioned that such references should strictly and necessarily be other than the previous employers, friends and relatives. The inclusion of such a clause seems to be quite logical as well as rational. The previous employers, friends and relatives can be bias or prejudiced. Therefore, they may tend to over-evaluate a candidate in order to create favorable impression; as a result, the candidate may score relatively more and better over other prospective candidates, especially on the background of stiff competitive environment. At such times, the candidates furnish the necessary details of persons from some other well-known social groups. However, in the field of Personnel Management, the word

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'Reference' strictly includes the references of previous employers and other professional personnel, as it is crystal clear from the findings of a few Research Papers in the field of Personnel Management.

Sometimes, there is observed tremendous confusion in the minds of the candidates while filling the Job Application Form, when they fail to understand the real meaning of the word 'Reference.' In this connection, there is a very famous joke. While giving such references, one of the job-aspiring candidates gave the references of the two cabinet ministers, out of natural innocence and technical ignorance. In-spite of this, excusing the innocence and giving the benefit of doubt to the candidate, he was called for the interview for the post he had applied for. In an interview he was questioned as to why he has given such funny references. Immediately he replied, 'I have given the references of the cabinet ministers because I know both of them very well.' It is an apart fact that the candidate was not selected for the post he had applied for, for want of merit and experience. It was taught by the senor members of the Interview Panel to the candidate that the word 'Reference' means 'Bi-lateral, that is Two-way Reference' and not 'Unilateral or One-way Reference.'

No doubt, the use of References is common in most selection procedures, as it is commented by C. W. Brooks, as mentioned in Review of Literature earlier, however, it may necessarily, not, at all, be simply because it involves only a little time and money, and minimum of effort. The real reasons for checking references may be varying from organization to organization; as a result, any generalization in this aspect is definitely not possible.

'A man is recognized by the company he keeps and the thoughts he has,' there is an old proverb in English. The proverb implies that the ideal intention of the recruiter or the employer behind Reference Checking may be to check the overall background and the culture of the 'would be' candidate. If, at the pre-selection stage in itself, the Personnel Manager would suspect seriously and sincerely, about the socio-cultural suitability of a 'would be' candidate with the prevailing culture of the organization, the candidate would never ever be selected. Furthermore, if required at this stage itself, there can be checked some more details about working attitude and organizational behavioral nature of a 'would be' candidate. It is needless to point out over here that a smart candidate with 'You Attitude' (caring for others – in an Organizational context, Superiors, Colleagues) and not 'I Attitude.' and of adjustable and adaptable nature would naturally be selected.

From the perspective of Personnel Management, 'Reference Check' as a procedure places high reliance on the 'would be' candidate's evaluation at the hands of former employers as well as some other professional personnel. Checks on different references, now-a-days, are generally made by either an e-mail or mobile and occasionally in person or by using a 'Reference Form,' specially structured for getting answers to specific questions. At this juncture, it is important to note that such several references should clearly and honestly indicate as to how long and also in what capacity the referees had either direct or indirect contact or association with the prospective candidate.

ROLE OF 'REFERENCE CHECK

Whenever a Personnel Manager lays special or additional emphasis on the details about a candidate as furnished by the referee, it proceeds with the two hypotheses. Firstly, the details so furnished are not only true and correct to the best of the referees' knowledge about the candidate in their organizations but they are indeed genuine, not biased or prejudiced and furthermore they are not political in their nature or character. In case, the details, referred to, are not genuine but they are biased or prejudiced and political, real essential information about a candidate in question cannot be obtained. Secondly, the candidate would behave, more or less, in the same manner, style and the way; he behaved in the earlier organizations. As it is a well known fact that a man is a learning animal and he always intends to improve over his past mistakes and errors, if at all, they are properly pointed out and also understandable guidelines for improvement are given in time. In other words, the information, thus received, about a candidate, at times, may be fully misleading or misrepresenting. It may either be favorable or unfavorable for the candidate.

Moreover, the Researcher's observations confirm the same point. On some occasions, in the course of his dealings with reputed organizations it so happened that the information received about a few candidates from their previous employers and other professional personnel was fully misleading and misrepresenting. The Researcher is showing courage to write such a bold statement because he was also asked to furnish the information about functioning of the same employees, when the opinion of the Researcher and other personnel differed, a lot. As a matter of fact, a special kind of Case Study can certainly be well developed on the basis of the facts of these exceptional cases or after development of such inspiring and exciting Case Studies; another Research Paper can surely be written down.

Thus, the foregoing discussion does suggest that, at times, the opinions of previous employers and other Personnel about a candidate may be unfavorable or not encouraging, at all, for the candidate. As a result, a good

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and promising candidate may lose an opportunity to get selected, if his application is rejected solely on the basis of the recommendations of such referees who have given unfavorable opinion.

RESEARCHER'S RECOMMENDATIONS

Recommendation No I

Unless and until a person whose reference is given in a Job Application Form knows in person the referee – the person who has given his reference, he is surely not in a comfortable position to form his firm view or personal opinion about a candidate and communicate it to the Organization. In order to evade Reference Check as a surprise for the person whose reference is given in a Job Application Form, it is, indeed, ideal to inform such a person, preferably prior to giving a reference. In case, such a person objects to act likewise, the said reference is needed to be changed. But, for some reason or the other, if it is not possible for the applicant to inform the person, whose reference is given, prior to giving the reference, it may be given afterwards, however, definitely before the organization is likely to call for reference Check.

Recommendation No II

While giving such references a precaution needs to be taken. The referee must have full faith or confidence on a person whose reference is given in a Job Application Form in the sense that the refereed person would definitely speak in favor and not against the candidate. Otherwise, the fundamental objective of giving a reference would stand totally defeated. Whenever, there exists even a slight doubt about sanity of a particular person and his probable reaction to the 'Reference Check,' indeed, it is advisable not, at all, to give his reference as his even one or two bad and running remarks can fully ruin the future of the candidate.

Recommendation No III

A Personnel Manager should decide either on his own or in consultation with other responsible, preferably senior members of the organization, if required, as to how much significance is to be attached to 'Reference Check' after carefully in the light of its relative merits as well as demerits.

RESEARCH PAPER LIMITATIONS

- 1. As the Research study for this Paper is based on Human Views, that is, Views of the Researcher, all the limitations of Human Views have direct and deep impact on various views formed and inferences arrived at by the Researcher in this Research Paper. (At the same time, it may, necessarily, not, at all, be out of place to point out, over here that those views and inferences are based on fully considered, well balanced and sound judgment of past real situations in different Corporate and Academic Organizations.)
- 2. Various views expressed in this Research Paper are partially based on Organizational Observations of the Researcher himself and his Experiences during Organizational interactions with many Personnel Managers. As a result, full Concurrence with all the personal views as well as personal opinions of the Researcher is certainly not possible, in practice.

SCOPE FOR FUTURE RESEARCH

During the course of the study of this Research Paper, the researcher found out that there is an ample scope and adequate potential for research in future for the following topic related to the nature of Organizational relationship between the Superior and the Subordinate.

1. The Impact of Reference Check on Selection of a Candidate in Indian Organizations: An Empirical Study

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A STUDY ON ISSUES AND CHALLENGES FACED BY GREEN MARKETERS AND STRATEGIES TO POSITION IN THE POTENTIAL CONSUMER SEGMENT

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ABSTRACT

The research evaluates the certainty and consequences of Green Marketing with its issues and challenges consociate with the period of an integrated global economy. Nowadays Green marketing performs as a vital element of the universal marketing. Green marketing possesses items and services displaying leading green products on a groundwork of cognizant and surroundings. Customers these days prefer or rely more on items or services manufactured by way of environment friendly techniques, avoiding global warming essence which in turn functions as a tenacious power of organizations for adopting green process. Organizations transport items which can satisfy consumers simultaneously fulfilling social responsibility. This process is quite helpful in providing influencing results to avoid retrenchment & waste which in turn build trust of consumers and society. Honesty towards specific brand is improved by fulfilling every aspect of social liability for society centric consumers. Green marketing has much possibility to develop as it has been just initiated and working on it will lead us to its viability aspect i.e., how much feasible it can become. It is pretty complicated and time consuming task to motivate customers to adopt green marketing products as organizations need to satiate customers demand, advertizing Eco friendly symbols on products and by avoiding anti-social activities. A fraction of consumers still has a strong sense of belief that green products are merely selling strategies for esteemed organizations and having such mental state they are quite reluctant to invest an extra penny on products or services. Therefore, this research will prove to be a crucial platform for awakening consumer's mindset in developing and enhancing their environment friendly demand.

Keywords: Green Marketing, Globalization, Issues, Challenges, Environment-friendly, Social Responsibility, Environment.

INTRODUCTION

Green marketing is an important process which includes the eco-friendly goods or eco-wrapping techniques claims by American Marketing Association. It promotes to nurture and protects the eco-friendly atmosphere. Adopting green methodologies for product and services is a very frequent practice for influential selling strategies and renowned branding ways. Some green, transforming approach for organizations and customers are less energy consuming, varying atmosphere, destroying wildlife, extinct-species and mass media next to wildlife acts as a strong driving force for turning green. Innovative trends and techniques of social aspect tend to modify and develop consequences for meeting market environmental friendly challenge. Consumers as well as marketers have developed the sense of awareness to go green in terms of product or services. Presently marketing is a customer centric system which exhibits the dominance of consumers and the manufacturers have to manufacture the customized products meeting customers overall demand. Customer requirements are based on their individual wants and the capability to pay for it. For sake of meeting these requirements, manufacturers ignore eco-friendly methodologies and keep on targeting customer's demands merely. Similar issue held's at customer's part as well. Customers desire for their own requirements instead of focusing environment favoring technologies. Hence this research gives input in shifting our direction of thoughts towards green marketing policies.

2. LITERATURE REVIEW

Honion and Kinnear (1976) have defined green consumers as those who are environmentally conscious. According to Antil (1984), when consumers display specific types of socially conscious behavior with the intention of protecting the environment, it is called green consumerism. Weiner and Doescher (1991), have described green consumerism as pro-social consumer behavior. As defined by Michael Polonsky (1994), green marketing consists of all the activities that intend to satisfy human needs and wants with minimum detrimental impact on the natural environment. Various research studies have suggested that consumers prefer environmentally safe products and have shown strong willingness to purchase these products. However, how much action has been taken by the consumers in this direction is still debatable (Mendleson N, Polonsky MJ, 1995). In a research conducted by Mintel (1995), significant gap is found between consumers' concern and actual purchasing. Green marketing has also been perceived as an opportunity for achieving organizational objectives (Kellar1987). Daves (1992), Freeman and Liedtka (1991),Keller (1987) and Shearer (1990)

suggested that the organizations have moral obligations of serving the society by being more environment-friendly.

Davidson et al (1985) believed that the consumer's attitude towards products is a direct outcome of personal experiences. However, when it comes to green consumerism, consumer's attitude and behavior were not found to be very consistent. Maineri et al (1997) discovered a very low correlation between consumer's attitude and green behavior. As per Juwaheer (2005), although consumers are aware about green products, application of green marketing practices in business operations is a difficult task. There are several challenges faced by green marketers. The high price of green products is one of the major reasons why customers are not willing to purchase green products. Many times, customers are not willing to pay premium price for green products. In such cases, companies have to extensively communicate the benefits of green marketing to consumers through various tools of integrated marketing communication.

Lack of set standards and common consensus among the masses as to what actually constitutes "green" is another challenge faced by marketers (Shafaat and Sultan, 2012). Despite all these challenges, green marketing is gaining popularity. Companies are willing to take initiative in producing environmentally friendly products.

3. EVOLUTION OF GREEN MARKETING

According to a research done by Paul Stoneman, if we want to improve and grow the market for green products, financial incentives are a prerequisite. Another study done by Mintel suggests that 66% of consumers in the United States do not buy green products because of high cost whereas 34% claim non-availability of green products. This shows that there is a huge potential for untapped market and customer requirement which the companies can exploit for capturing market share and gaining advantage over their competitors in the global scenario. Many global companies have taken initiatives like recycling and using alternative fuels, greenhouse gas reduction, using renewable sources of energy to increase their accountability towards the environment.

4. GREEN MARKETING: GLOBAL SCENARIO

Paul Stoneman researched on the developmental aspect of green commodities by introducing financial incentive techniques in order to increase their movement in the market. On the other hand, Mintel gave facts based on non acknowledgment of green products by 66% customers in the United States due to their expensive prices while 34% customers expressed the problem of absence of green products among other prevailing products in the market. Thus accordingly one can realize the vast ratio of un-explored market untouched by customer's knowledge and access which can still be explored and accessed by customers to attain preferred positions among competitors and covering huge market share. For fulfilling social responsibility, many international firms have introduced environment friendly technologies like increasing production of recyclable goods through optional fuels and greenhouse and global warming gas abatement.

5. GREEN MARKETING: INDIAN SCENARIO

Emergent Ventures India analyzed after latest research in New Delhi, India that customers know the idea of buying green goods but they do not implement it. Green marketing concept is on progressive stage in India. Green Marketing has a wider probability to grow in Indian market specifically in FMCG sector.

6. REASONS TO BE GREEN

6.1 Social Responsibility: Several organizations are aware of the fact of green techniques for their business and they must have the sense of social responsibility for protecting the environment with their essential aim of overall profiteering. Dutiful expression towards the environment was presented by Walt Disney World in their way of working strategies. Around 35000 hectares of the barren lands and dry areas were nourished and watered by ITC's watershed Development Initiative.

6.2 Opportunity: Indian scenario gave the brief details of overall customer's tastes and interests about the nature of consuming products out of which 25% prioritized the green products and around 28% were health conscious. Some other illustrations said about usage of CNG in most transport mechanism to get rid of air pollution and HCL eco-safe Company exhibited HCL environmental management policy.

6.3 Governmental Pressure: Government had also set up several policies and norms for protecting environment by way of prohibiting plastic bags, ban of smoking in public places to decrease the manufacturing of anti-environmental products and their raw materials.

6.4 Competitive-pressure: Nowadays organizations are willing to get an extra edge over their competitors and to build it up they are taking several steps to gain advantage in prevailing market as Niche companies like the Body Shop, Organic India & Green & black have initiated to follow the policies of green marketing in comparison of their competitors.

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7. CHALLENGES OF GREEN MARKETING

7.1 New Concept: For Indian consumers, green marketing is an innovative term. However, consumers belonging to urban areas are slowly ascertaining about the positives of green products. Although customers have still a high probability to know more about damages made to us by using non-green products, but this process is quite time-consuming and effort-taking.

7.2 Huge investments on R&D: For evolving the concept of green marketing, organizations have to increase their investment on its research and development part. We could say by this that it could be a task for supporters of green marketing as organizations are not interested in investing all caliber, finances and time on R&D of it.

7.3 Risk for the companies: For developing green products and strategies, tremendous amount of uncertainty is involved as there is no guarantee for wider growth and profit maximization under it.

7.4 Long term Process: Those organizations who want to come up with an idea of green marketing must have great patience for sustainment as this concept is quite time taking and risky due to ignorance and in cognizance of this terminology among consumers.

8. STRATEGIES TO BE EXECUTED FOR GREEN MARKETING

8.1 Value positioning of customer: Companies must manufacture customized products and services and fulfill all the requirements of customers, focusing on eco-friendly products so that important part of a customer's population should be covered.

8.2 Quantification of environmental benefits: Customers of India can way better realize the advantages of green marketing if it is about profiteering. Star rating program can illustrate it in the effective way. Earlier the products were presented with energy saving labels, but it was not taken seriously by customers as they considered it as norms of government. After that the regulations like "Jago Grahak Jago" were initiated to make them realize about their savings on product consumption in relation to the star ratings, consumers were highly motivated and satisfied.

8.3 Cost Effective products: With the growing concern towards the environment, another strategy to be implemented by marketers is to provide environmentally friendly products at a lower cost. Indian consumers are price conscious and hence they prefer high quality products at reasonable price. Manufacturers should produce green products with the most cost efficient resources. This reduction in cost can then be passed on to the consumers in the form of reduced prices. With the implementation of this strategy, green consumers can get good quality products at lower rates and the companies also get profit due to escalating demand of eco-friendly products at a cheaper price.

8.4 Improving Environment Adherence Standards: There are several international standards on the environment and environmental management systems. The most reliable and reputed international standard is the ISO 14000. ISO 14000 scrutinizes the process of manufacturing the product along with the production of goods in an eco-friendly manner. Various standards, eco-mark labeling, etc. have been developed by the "Bureau of Indian Standards" to ensure the manufacturing of environment-friendly goods. Although it has been noticed that the compliance of these standards exists only on paper but the implementation hardly takes place. Companies must adhere to these standards, making their processes more transparent and reliable in order to win the customers' trust and loyalty.

9. GREEN MARKETING MIX

The green marketing mix includes product development and implementation of strategies pertaining to pricing, promotion and distribution in order to promote environmental awareness .When companies make new innovations such as eco-friendly products they get an opportunity to enter into new market, thereby, increasing their profit. Companies need to implement green policies in order to produce a product, set its price, display an advertisement and place a product in the market. Here are the 4ps of green marketing-

9.1 Green Product- A green product can be defined as an item that is produced in an environmentally conscious way, has less negative impact on the environment, is made from recycled material and preserves natural resources. According to a research done by Compher (2013), consumers want greener products. Consumers want green products as they believe them to be healthy, organic and help in preserving the environment. Manget, Roche and Munich (2009), found that consumers prefer green products because of the benefits associated with them such as more freshness, promise of safety and health and saving on cost.

9.2 Green Price- Price is the amount an individual pays to obtain an item. Price is one of the crucial elements of the green marketing mix. According to Bukhari (2011), price is the main reason consumers do not buy green

products as they consider them to be expensive. In his study, Boztepe (2012), found a remarkable shift in the relationship between price and consumer buying behavior, as younger consumers were willing to pay a higher price. Consumers will pay a higher price for green products only when they find the product loaded with extra benefits such as visually more appealing, better functions, improved performance etc.

9.3 Green promotion- Product's packaging is one of the major factors that attract consumers when they do not have prior knowledge about the product. Agyeman (2014) accredited that a consumer's choice is highly influenced by the packaging. Dairs (2014) asserted that women consumers are more influenced by the product's packaging than their male counterparts. Women examine the labeling more closely to check if the product was manufactured with recycled materials. In another study made by Ahern (2013), it was established that emotional advertising plays a significant role in determining consumers' preference and decision making.

Ansar (2013) consorts that advertisements contribute significantly in enhancing consumer's knowledge about the green products and helps them to make rational decisions and know their impact on the environment. Hence, green environments will attract more consumers and might also influence their purchasing decisions.

9.4 Green place- Product placing is another important element of the green marketing mix. Kontic (2010) presume that the location and accessibility of goods and services affect a consumers' choice of buying the product, as the consumers are not willing to travel far to buy a green product and would rather choose a closer substitute, therefore, green products should be positioned broadly in the marketplace. When green products are easily accessible, their sale increases.

10. CONCLUSION

As said earlier, Green Marketing still persists in its initial stage in India. After several researches been conducted, the results are exhibiting that customers are developing the sense of environmental awareness. Green marketing must be included in the mandatory rule list of every organization rather than keeping it as option by developing a sense of consciousness towards global warming, ozone depletion, etc. It is an innovative and crucial change which should be included in performing corporate functioning by understanding genuineness of environment. Increasing the fraction of hard core consumers and improving brand's performance, entrepreneurs must take this as a challenge to realize the objectives of green marketing and search the findings related to it.

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A STUDY ON PROBLEMS AND PROSPECTS OF PATTAMADAI HANDLOOM MAT WEAVING INDUSTRY IN TIRUNELVELI DISTRICT OF TAMILNADU

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ABSTRACT

The handloom sector plays an important role in the economic development of the rural poor in the state. It contributes significantly by generating more employment opportunities and providing bread to the rural poor. At present study of Handloom mat weavers in Tirunelveli District is at stake and the weavers are panic stricken with miseries since they are facing acute production and marketing problems. The main aim of the study is to know the socio–economic conditions of handloom mat weavers in Pattamadai, Tirunelveli district, identify the problems of handloom mat weavers. The study is empirical nature, which includes both primary source and secondary source. Secondary data required for the study have been collected from the government agencies, journals, books, magazines and websites. Primary data was collected through a well-structured interview schedule. In this study, the researcher used proportionate random sampling method. The total sample respondents for the study were 60. They are 20 independent weavers, 20 weavers working under middlemen and 20 co-operative society weavers have been covered in the study. Statistical tools such as percentages, ANOVA and factor analysis have been used for analysis in the study. It is found that shortage of labour and unskilled labour are the major problems faced by the handloom mat weavers.

Keywords: Handloom mat weavers, production and marketing problems

INTRODUCTION

Weaving is one of the most ancient of the arts known to man. It requires the combination of human ingenuity and needs. Whatever its origin, textile production is so essential that it has a significant presence in our language, customs, and literature. Mat weaving is Koraigrass the most important industry engaging a number of workers throughout the State. Korai belongs to the Cyperus family. Cyperus are tender, aquatic perennials, grown for decorative foliage. Produces clumps of long stems, 1 to 3 feet normally, but up to 5 feet in excellent conditions; these are crowned with long, slender, radiating, dark green leaves like an umbrella, thus gives it the common name. India is traditionally a country of artistic crafts and handicrafts. For a long period of time these craft works in India were concentrated in specific geographical locations based upon a system of occupational specialization which in small segments of community created a special art folk. The history of mat weaving in India dates back to the Indus Valley Civilization. Mats in India are of different kinds and are produced in different parts of the country. The handloom sector is the oldest among them with a long tradition of excellence and unrivalled craftsmanship. Mat weaving is a highly developed rural handicraft in Tirunelveli District of Tamilnadu and the mats woven there are renowned through India and abroad for their exquisite quality and texture. The famous Pattamadai Fine Mat Weavers Co-operative Society had unique honour of producing a mat of very exquisite quality and design which was presented by the then Government of Madras to Her Majesty the Queen Elizabeth of England, as Coronation Gift through His Royal Highness the Duke of Edinburgh, when he visited Madras in January 1959.

STATEMENT OF THE PROBLEM

The handloom sector plays an important role in the economic development of the rural poor in the state. It contributes significantly by generating more employment opportunities and providing bread to the rural poor. At present study of Handloom mat weavers in Tirunelveli District is at stake and the weavers are panic stricken with miseries since they are facing acute production and marketing problems.

The living standard of the weavers is significantly low and they are leading miserable and pitiable life due to unemployment and underemployment. This situation prevails everywhere in the study area which is chosen for detailed research study. This pathetic condition of handloom mat weaving industry in Tirunelveli District demands a thorough investigation into the problems and measures to plug the loopholes and find remedies to the problems confronting handloom the mat weavers.

OBJECTIVES OF THE STUDY

The study was conducted with the following objectives.

- > To know the socio-economic conditions of handloom mat weavers in Pattamadai, Tirunelveli district.
- > To identify the problems of handloom mat wevers in Pattamadai, Tirunelveli district.
- > To suggest concrete measures to strengthen handloom mat weaving.

SCOPE OF THE STUDY

Handloom sector is a major non-farm employer in the country. Handloom weaving is one of the most important non-agricultural sources of income in India. The economic wealth of the working person depends on the work of the individual. The work also alters the social hierarchy of the individuals. Hence every individual employee expects social as well as the provision of higher economic status from the work or occupation. The economic growth of a country depends on the rate of employment and industrialization in the country. In this backdrop, the present study has been taken up to identify the problems in the study areas and to suggest appropriate measures to resolve the problems.

To carry out the study on sound lines, it was hypothesized that the handloom mat weaving industry is suffering from several problems in raw material, production, marketing, technology, and finance.

METHODOLOGY

The study is empirical nature, which includes both primary source and secondary source. Secondary data required for the study have been collected from the government agencies, journals, books, magazines and websites. Primary data was collected through a well-structured interview schedule.

In this study, the researcher used proportionate random sampling method. The total sample respondents for the study were 60. They are 20 independent weavers, 20 weavers working under middlemen and 20 co-operative society weavers have been covered in the study.

STATISTICAL TOOLS USED FOR THE STUDY

Statistical tools such as percentages, ANOVA and factor analysis have been used for analysis in the study.

LIMITATIONS OF THE STUDY

The major constraints and limits were recorded by the researcher, especially while conducting the field survey. Surprisingly most of the mat weavers are illiterate and ignorant. Though, they might be aware of their exploitation by the loom owners and the middle men, they didn't disclose the issue because they don't want to lose their job by way of revealing the truth.

DATA ANALYSIS AND INTERPRETATION

| Sl. No | Age | No. of Respondents | Percentage |
|--------|----------------|--------------------|------------|
| 1. | 31-40 years | 10 | 16.7 |
| 2. | 41-50 years | 35 | 58.3 |
| 3. | Above 50 years | 15 | 25.0 |
| | Total | 60 | 100 |

Table - 1: Age wise classification of Handloom Mat Weavers

Source: Primary data

It could be inferred from Table 1 that out of 60 handloom mat weavers, majority (58.3%) are in the age group of 41 to 50 years and next majority of 25 per cent of the handloom mat weavers are in the age group of above 50 years. This shows that those who are in the age group of 41 to 50 years and above 50 years have been highly involved in handloom mat weaving, because they do not know about other work and there are no employment opportunities in this area. Hence they are unwillingly involved in handloom mat weaving.

Table - 2: Marital Status wise classification of Handloom Mat Weavers

| Sl. No | Marital Status | No. of Respondents | Percentage |
|--------|----------------|--------------------|------------|
| 1. | Unmarried | 3 | 5.0 |
| 2. | Married | 35 | 58.3 |
| 3. | Divorced | 10 | 16.7 |
| 4. | Widow | 12 | 20.0 |
| | Total | 60 | 100 |

Source: Primary data

The study indicated that out of 60 handloom mat weavers, the majority of the handloom mat weavers (58.3%) are married and next majority of 20 per cent of the handloom mat weavers are widowed. This shows that those who are married want to work in handloom mat weaving because they have family commitment.

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| Ed 4 64 . 4 | | |
|------------------|-----------------------------|-------------------------|
| Education Status | No. of Respondents | Percentage |
| Illiterate | 9 | 15.0 |
| Primary | 40 | 66.7 |
| Secondary | 7 | 11.7 |
| HSC | 4 | 6.6 |
| Total | 60 | 100 |
| | Primary Secondary HSC | Primary40Secondary7HSC4 |

Source: Primary data

As set out in Table 3, out of 60 handloom mat weavers, the largest numbers of handloom mat weavers i.e., 66.7 per cent have primary educational qualification and next largest numbers of handloom mat weavers i.e., 15 per cent are illiterates. This shows that those who have primary educational qualification want to work in handloom mat weaving and those who have high educational qualification do not prefer to work in handloom mat weaving.

| | Tuble II Monthly meetine wise cha | | |
|--------|-----------------------------------|--------------------|------------|
| Sl. No | Monthly Income | No. of Respondents | Percentage |
| 1. | Less than Rs.2500 | 16 | 26.7 |
| 2. | Rs.2500-5000 | 40 | 66.7 |
| 3. | Rs.5001-7500 | 4 | 6.6 |
| | Total | 60 | 100 |

 Table – 4: Monthly Income wise classifications of Handloom Mat Weavers

Source: Primary data

Table 4 shows that out of the total 60 handloom mat weavers, majority of 66.7 per cent of the handloom mat weavers earn monthly income of Rs.2500 to 5000 and next majority of 26.7 per cent of the handloom mat weavers earn monthly income of less than Rs.2500.

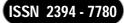
PROBLEMS AMONG DIFFERENT AGE GROUP OF HANDLOOM MAT WEAVERS

Handloom mat weavers of different age groups have different problems. In order to find out the significant difference in problems among different age group of handloom mat weavers in Tirunelveli district, 'ANOVA' test is attempted with the null hypothesis as, **"There is no significant difference in problems among different age group of handloom mat weavers in Tirunelveli district"**. The result of 'ANOVA' test for problems among different age group of handloom mat weavers is presented in Table 5.

Table - 5: Problems among different age group of Handloom Mat Weavers

| Problems | | Age | | | | |
|---|--------|--------|----------|---------|--|--|
| | 31-40 | 41-50 | Above 50 | | | |
| | years | years | years | | | |
| Shortage of labour | 4.8286 | 4.5385 | 4.3000 | 1.814 | | |
| Unskilled labour | 4.8000 | 4.3846 | 3.7000 | 12.767* | | |
| Dual responsibility | 4.6571 | 4.0769 | 3.9000 | 3.414* | | |
| Lack of access to new techniques | 4.4223 | 4.3077 | 3.6000 | 5.531* | | |
| Lack of number of looms | 4.3429 | 3.8462 | 3.5000 | 3.301* | | |
| Lack of upgraded looms | 4.6571 | 3.5385 | 3.4000 | 11.226* | | |
| Lack of knowledge about new designs | 4.6286 | 4.3621 | 3.8000 | 5.312* | | |
| Lack of financial help from government | 4.6978 | 4.4483 | 4.2308 | 6.069* | | |
| Shortage of working capital | 4.6286 | 4.4615 | 3.4605 | 7.239* | | |
| Low profit | 4.7143 | 4.3077 | 3.3000 | 9.349* | | |
| High rate of interest for the loan | 4.3429 | 4.2308 | 3.7000 | 1.423 | | |
| No subsidy | 4.4571 | 4.3846 | 3.6000 | 2.867 | | |
| Imperfect knowledge to get assistance from | 4.4286 | 4.1897 | 3.3000 | 4.969* | | |
| commercial bank | | | | | | |
| Inadequate assistance from financial institutions | 3.9429 | 3.6379 | 3.3077 | 2.712 | | |
| Competition from power loom/plastic mats | 3.9714 | 3.3846 | 3.1000 | 3.209* | | |
| Lack of adequate marketing facility | 3.8462 | 3.6207 | 3.5429 | 1.306 | | |
| Lack of knowledge about today's market trends | 3.6857 | 3.6000 | 3.5862 | 1.499 | | |

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| Lack of motivation from government side | 3.8000 | 3.6724 | 3.2308 | 1.257 |
|---|---------------|-------------|----------|-------|
| Lack of knowledge in the export | 3.7143 | 3.5000 | 3.1538 | 1.264 |
| Lack of accessibility of market information | 3.7714 | 3.6154 | 3.4000 | 1.399 |
| Lack of awareness among the customer about | 3.5714 | 3.5385 | 3.5340 | 1.070 |
| product features | | | | |
| Lack of promotion and advertising of handloom | 3.4571 | 3.4004 | 3.1538 | 1.260 |
| Source: Computed data * Sign | nificant at f | ivo nor oor | nt lovol | |

Source: Computed data *-Significant at five per cent level

Table 5 shows the mean score of problems among different age group of handloom mat weavers along with its respective 'F' statistics. The main problems among the handloom mat weavers in the age group of 20 to 30 years, 41 to 50 years and above 50 years are shortage of labour and their respective mean scores being 4.8286, 4.5385 and 4.3000. Regarding the problems, the significant difference among the different age group of handloom mat weavers, are identified in the case of unskilled labour, dual responsibility, lack of access to new techniques, lack of number of looms, lack of upgraded looms, lack of knowledge about new designs, lack of financial help from government, shortage of working capital, low profit, imperfect knowledge to get assistance from commercial bank and competition from power loom/plastic mats since the respective 'F' statistics are significant at 5 per cent level, the null hypothesis is rejected.

PROBLEMS AMONG DIFFERENT MARITAL STATUS OF HANDLOOM MAT WEAVERS

Handloom mat weavers of different marital status have different problems. In order to find out the significant difference in problems among different marital status of handloom mat weavers in Tirunelveli district, 'ANOVA' test is attempted with the null hypothesis as, **"There is no significant difference in problems among different marital status of handloom mat weavers in Tirunelveli district"**. The result of 'ANOVA' test for problems among different marital status of handloom mat weavers is presented in Table 6.

| Problems | | Marital Status | | | | |
|--|-----------|----------------|----------|--------|--------|--|
| | Unmarried | Married | Divorced | Widow | | |
| Shortage of labour | 4.8333 | 4.5758 | 4.7143 | 4.7500 | 1.276 | |
| Unskilled labour | 4.7500 | 4.4371 | 4.5345 | 4.3636 | 1.363 | |
| Dual responsibility | 4.7215 | 4.1500 | 4.5714 | 4.3966 | 1.707 | |
| Lack of access to new techniques | 4.1667 | 4.0000 | 4.0862 | 4.1212 | 1.066 | |
| Lack of number of looms | 4.5833 | 4.1429 | 4.2727 | 4.3793 | 0.955 | |
| Lack of upgraded looms | 4.5800 | 3.8333 | 4.1429 | 4.1897 | 2.784* | |
| Lack of knowledge about new designs | 4.6607 | 4.3621 | 4.1818 | 4.5833 | 1.168 | |
| Lack of financial help from government | 4.5714 | 4.1212 | 4.3966 | 4.3383 | 2.953* | |
| Shortage of working capital | 4.7583 | 4.0000 | 4.3793 | 4.2424 | 1.421 | |
| Low profit | 4.2121 | 3.8571 | 4.2069 | 4.1667 | 1.609 | |
| High rate of interest for the loan | 4.4167 | 3.7143 | 4.3636 | 4.2931 | 1.820 | |
| No subsidy | 4.2500 | 3.8715 | 4.1897 | 4.0909 | 1.528 | |
| Imperfect knowledge to get assistance from commercial bank | 3.8000 | 3.2857 | 3.7273 | 3.5800 | 1.299 | |
| Inadequate assistance from financial institutions | 3.7273 | 3.6897 | 3.6667 | 3.2875 | 1.262 | |
| Competition from power loom/plastic mats | 3.7556 | 3.0000 | 3.6207 | 3.5833 | 1.789 | |
| Lack of adequate marketing facility | 4.1429 | 3.1667 | 3.4167 | 3.6061 | 1.890 | |
| Lack of knowledge about today's market trends | 4.3492 | 3.2500 | 3.7740 | 3.6970 | 1.981 | |
| Lack of motivation from government side | 3.7567 | 3.0000 | 3.5000 | 3.5714 | 1.411 | |
| Lack of knowledge in the export | 4.1564 | 3.6364 | 3.6724 | 3.7143 | 1.439 | |
| Lack of accessibility of market | 3.8571 | 3.1776 | 3.5345 | 3.5758 | 1.515 | |

Table - 6: Problems among different marital status of handloom mat weavers

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| information | | | | | |
|--------------------------------------|--------|--------|--------|--------|--------|
| Lack of awareness among the | 3.7143 | 2.6667 | 3.4545 | 3.3793 | 2.912* |
| customer about product features | | | | | |
| Lack of promotion and advertising of | 4.0000 | 3.3333 | 3.5717 | 3.6463 | 1.142 |
| handloom | | | | | |

Source: Computed data *-Significant at five per cent level

Table 6 shows the mean score of problems among different marital status of weavers working under middlemen along with its respective 'F' statistics. The main problems among the unmarried, married, divorced and widow handloom mat weavers are shortage of labour and their respective mean scores being 4.8333, 4.5758, 4.7143 and 4.7500. Regarding the problems, the significant difference among the different marital status of handloom mat weavers, are identified in the case of lack of upgraded looms, lack of financial help from government and lack of awareness among the customer about product features since the respective 'F' statistics are significant at 5 per cent level, the null hypothesis is rejected.

PROBLEMS AMONG DIFFERENT EDUCATIONAL STATUS OF HANDLOOM MAT WEAVERS

Handloom mat weavers of different educational status have different problems. In order to find out the significant difference in problems among different educational status of handloom mat weavers in Tirunelveli district, 'ANOVA' test is attempted with the null hypothesis as, **"There is no significant difference in problems among different educational status of handloom mat weavers in Tirunelveli district".** The result of 'ANOVA' test for problems among different educational status of handloom mat weavers is presented in Table 7.

| Table – 7: Problems among differ | ent educational status of handloom mat weav | vers |
|----------------------------------|---|------|
| | | |

| Problems | | | F-Statistics | | |
|---|------------|---------|---------------------|--------|--------|
| | Illiterate | Primary | Secondary | HSC | |
| Shortage of labour | 4.8462 | 4.7778 | 4.6552 | 4.4615 | 1.842 |
| Unskilled labour | 4.7143 | 4.5556 | 4.5385 | 4.3077 | 1.649 |
| Dual responsibility | 4.4615 | 4.3966 | 4.3889 | 4.2257 | 1.092 |
| Lack of access to new techniques | 4.2625 | 4.3793 | 4.3333 | 4.2308 | 1.226 |
| Lack of number of looms | 4.5385 | 4.0862 | 4.0556 | 3.8462 | 3.196* |
| Lack of upgraded looms | 4.3077 | 4.2857 | 4.1897 | 4.0000 | 1.214 |
| Lack of knowledge about new designs | 4.4615 | 4.3621 | 4.2875 | 4.2778 | 1.205 |
| Lack of financial help from government | 4.3077 | 4.2700 | 4.1875 | 4.1667 | 1.173 |
| Shortage of working capital | 4.4610 | 4.3621 | 4.2778 | 4.0000 | 1.420 |
| Low profit | 4.5385 | 4.5000 | 4.4483 | 4.3350 | 1.062 |
| High rate of interest for the loan | 4.6154 | 4.3889 | 4.3089 | 4.2143 | 1.514 |
| No subsidy | 4.6541 | 4.3966 | 4.3846 | 4.3012 | 1.275 |
| Imperfect knowledge to get assistance from | 4.3846 | 4.2069 | 4.1538 | 3.9286 | 1.886 |
| commercial bank | | | | | |
| Inadequate assistance from financial | 4.4630 | 4.3112 | 4.2931 | 4.0714 | 2.898* |
| institutions | | | | | |
| Competition from power loom/plastic mats | 4.4615 | 4.1897 | 4.0769 | 2.8571 | 5.156* |
| Lack of adequate marketing facility | 4.2778 | 3.9231 | 3.7692 | 2.6429 | 2.838* |
| Lack of knowledge about today's market | 4.1667 | 3.6154 | 3.5385 | 3.0000 | 1.516 |
| trends | | | | | |
| Lack of motivation from government side | 4.0556 | 3.4615 | 3.3571 | 3.3077 | 1.025 |
| Lack of knowledge in the export | 3.7143 | 3.6923 | 3.6724 | 3.6111 | 1.739 |
| Lack of accessibility of market information | 3.8462 | 3.5714 | 3.5385 | 3.1667 | 1.330 |
| Lack of awareness among the customer | 3.9231 | 3.7143 | 3.6742 | 3.6154 | 1.123 |
| about product features | | | | | |
| Lack of promotion and advertising of | 3.5435 | 3.5000 | 3.4615 | 3.1546 | 1.240 |
| handloom | | | | | |

Source: Computed data *-Significant at five per cent level

Table 7 shows the mean score of problems among different educational status of handloom mat weavers along with its respective 'F' statistics. The main problems among the illiterate, primary educational, secondary education and higher secondary educational weavers are shortage of labour, their respective mean scores being

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4.8462, 4.7778, 4.6552 and 4.4615. Regarding the problems, the significant difference among the different educational status of handloom mat weavers, are identified in the case of lack of number of looms, inadequate assistance from financial institutions, competition from power loom/plastic mats and lack of adequate marketing facility since the respective 'F' statistics is significant at 5 per cent level, the null hypothesis is rejected.

| To reduce the raw material price241567860To reduce the raw material price241567860(40)(25)(10)(11.7)(13.3)(100)Government and Co-operative society should2118311760supply raw material at subsidy rate(35)(30)(5)(18.3)(11.7)(100)Covernment and Co-operative society should311625460(dy land) into raw material (korai grass)(55)(26.7)(3.3)(8.3)(6.7)(100)cultivated land12546060Provision of looms facilities is necessary261449760Government should take necessary steps to281439660provide welfare schemes(46.7)(23.3)(5)(15)(10)(100)Adequate training should be provided311129760support(53.3)(21.7)(18.3)(3.4)(15)(11.7)(100)Covernment to provide additional financial3213310960institution(56.7)(18.3)(3.4)(15)(6.7)(150)Covernment and Co-operative society should2115510760make awareness regarding upgraded handloom(35)(25)(8.3)(16.7)(11.7)< | Prospects | SA | Α | NO | DA | SDA | Total |
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| | | (55) | (20.7) | (3.3) | (0.3) | (0.7) | (100) |
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Table – 8: Prospects of Handloom Mat Weavers

Source: Primary data

The above table reveals that most of the handloom mat weavers either strongly agree or agree with the statements of prospects. Among the handloom mat weavers, majority of 63.3% are strongly agree with the statement 'Selling at different points will yield more income to improve the standard of living', next majority of 35% are agree with the statement 'Development of looms facilities is necessary', 25% are disagree with the statement 'Government should take steps for the export of handloom mat products', 15% of the handloom mat weavers are strongly disagree with the statement 'Co-operative society should provide warehousing facilities'.

SUGGESTIONS

- ➢ Government should give attention in up gradation and modernization of loom, equipments and infrastructural development for the betterment of the handloom mat weaving industry.
- In case of handloom, first of all, there is need to create awareness about the features and advantages of handloom mat products. Effective publicity through appropriate media mix should be done. Print and

electric media can be used in right proportion. A regular buyer-seller meet is required so that the weavers get a platform to market their products.

- To bring superior quality in handloom products the pre and post loom process development should take place. Innovative and faster weaving processes and techniques to increase efficiency of weavers as well as loom will make handloom more competitive and profitable.
- Training to enhance the skills of mat weavers in manufacturing and marketing aspects in changing business environment. Effective implementation of various policies and programs could be successful when there would be proper integration, cooperation and coordination from the government. Skill and design development exercises can be conducted for the mat weavers which will help them to understand and develop new product range as well as improve their design sensibility.

CONCLUSION

It is concluded that the handloom mat weavers feel that due to various reasons they do not get job satisfaction in their present occupation. Due to modernization of mat industry, the handloom mat weavers face lot of problems like low wages, poor working conditions, inadequate non-monetary benefits, and insufficient work throughout the year. Thus, the involvement of members and opinion will certainly improve the performance of handloom mat weavers' co-operative societies not only in the study area. So, the Government should take necessary steps to overcome the problems of handloom mat weavers and improve the social status of the handloom mat weavers. It is expected that the above suggestion will help to resolve the problems faced by handloom mat weaving industry in Tirunelveli district of Tamilnadu.

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ON THE CORRECT FORMULATION OF THE STARTING POINT OF CLASSICAL MECHANICS

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ABSTRACT

The correct scientific and critical analysis of the generally accepted foundations of classical mechanics is proposed. The methodological basis for the analysis is the unity of formal logic and of rational dialectics. The main results of the analysis are as follows: (1) the correct starting point of kinematics is formulated: the informational definition of the concept of time; definitions of the concepts of motion, speed, and acceleration of material point in the metric system of coordinates; the principle of motion of quantum particle (photon); proof of the mathematical, physical, and formal-logical erroneousness (fallaciousness) of Lorentz transformations; (2) the correct starting point of dynamics is formulated: the definition of force as a physical property of the structure of the system of the interacting objects; (3) the correct starting point of the theory of gravitation is formulated: the condition of existence of the gravitational interaction which represents the condition of existence of the law of gravitation within the framework of the system approach is given (the formulation represents the system of the proportions); (5) it is proved that the formulation of Newton's empirical law of gravitation represents the formal-logical and dialectical errors.

Keywords: general physics, special relativity, quantum mechanics, classical mechanics, formalisms in classical mechanics, Newtonian mechanics, post-Newtonian approximation, gravity, philosophy of science, history of science.

INTRODUCTION

Recently, the progress of sciences, engineering, and technology has given rise to a new problem: the problem of rationalization of the fundamental sciences (for example, theoretical physics and mathematics). Rationalization of sciences is impossible without rationalization of thinking and critical analysis of the foundations of sciences within the framework of the correct methodological basis: the unity of formal logic and of rational dialectics. Therefore, one should call achievements of classics of sciences in question within the framework of the correct methodological basis. As has been shown in works [1-99], the foundations of theoretical physics, of mathematics, and of philosophy contain formal-logical and dialectical errors. This signifies that any generally accepted theory can be refuted if it contradicts to the formal-logical and dialectical laws.

As is known [98-110], classical mechanics as a branch of physics arose from the needs of sciences and practice and has a long history of development. The important significance of classical mechanics is determined by the contribution of the prominent scientists of past time: J. Kepler, Galileo Galilei, I. Newton, J. L. Lagrange, W. R. Hamilton, and others. Since the end of the 20th century, the place of classical mechanics in physics has been no longer that of an independent theory. Instead, classical mechanics is now considered an approximate theory to the more general quantum mechanics. Classical mechanics is a theory useful for the study of the motion of nonquantum mechanical, low-energy particles in weak gravitational fields. In the 21st century classical mechanics has been extended into the complex domain and complex classical mechanics exhibits behaviors very similar to quantum mechanics.

However, the remarkable achievements of the prominent scientists do not signify that the problem of validity of classical mechanics is now completely solved or the foundations of classical mechanics are not in need of analysis within the framework of the correct methodological basis: the unity of formal logic and of rational dialectics. In my opinion, classical mechanics can be considered as a correct theory (scientific truth) if and only if it relies on the correct methodological basis. But there is no formal-logical and dialectical substantiation of classical mechanics in the scientific literature (for example, [98-110]).

In my opinion, the foundations of classical mechanics are not free from scientific objection. The purpose of this work is to propose the critical analysis of the starting point of classical mechanics. The methodological basis for the analysis is the unity of formal logic and of rational dialectics.

1. METHODOLOGICAL BASIS

As is known, correct methodological basis of sciences is the unity of formal logic and of rational dialectics. Use the correct methodological basis is a necessary condition for correct analysis to make distinction between truth and falsehood. However, this fact is ignored by majority of scientists until now. Therefore, the main statements of formal logic and of materialistic dialectics which are used in the present work must be stated. 1. The system is a set of elements that are in relations and connections with each other, forming certain integrity, unity.

2. The system principle reads as follows: the properties of the system are not a consequence of the properties of its elements; the system determines the properties of the elements; and the properties of the elements characterize the system;

3. The structure (construction, arrangement, order) is a set of stable connections (bonds) in object, which ensures its integrity and qualitative self-identity (i.e., which ensures the conservation of the basic properties) under different external and internal changes;

4. The system analysis of material system represents a task of finding the states of the material system. This task can be reduced to the task of finding quantitative (tabular or analytical) relationships between the characteristics of the elements of the material system under the condition of conservation of the structure (i.e., qualitative determinacy) of the system. The correct solution of the task should be based on the following practical operations (steps): (a) one chooses the element which must be subjected to a quantitative change (i.e., to a movement); the selected element undergoes the quantitative change without changing in the qualitative determinacy of the system; (b) one finds quantitative changes in other elements under changing in the selected element; these changes should not lead to a change in the structure of the system (i.e., to a change in the qualitative determinacy of the system); (c) one finds the boundaries of quantitative changes within which the system remains identical to itself; (d) one finds the elements which are not changed; (e) one finds a quantitative (tabular or analytic) relationships between the values and dimensions of the variables quantities which characterize elements. However, it should be emphasized that one can obtain an analytical solution of the task only in case of a simple statement of the problem or in the case of simple systems. In these cases, an analytical solution represents a proportion. The proportion represents linear relationship between the relative increments of the quantities describing the different elements.

5. Property is a philosophical category that designates such aspect of material object, which determines difference or commonality between other objects. Property is one of the aspects of the given object or phenomenon. Some properties express the qualitative determinacy of the object, others express the quantitative determinacy of the object;

6. Energy is a general quantitative measure of the quantitative and qualitative changes under interactions of material objects. Energy does not emerge (appear, spring up) from nothing and does not vanish (disappear; exterminate). It can only changes from one values and forms to another. Various (different) forms of energy are as follows: mechanical, internal, electromagnetic, chemical, nuclear and other forms. The law of conservation of energy reads as follows: the energy of an isolated system is conserved:

$$E^{(isolated system)} = const$$
.

7. Energy is an inherent (inalienable) physical property of material objects, which characterizes changes in the states of the material objects under interactions of material objects. Energy represents a physical quantity.

8. The material object is a body, a field, a particle, as well as a system of bodies, of fields, of particles.

9. Physical quantity is the unity of qualitative determinacy and of quantitative determinacy of a material object. Mathematics describes the change in the quantitative determinacy of a material object (physical quantity). In terms of formal logic, mathematics does not describe changes in qualitative determinacy of an object.

10. Mathematics studies the quantitative determinacy belonging to the qualitative determinacy of the object. In accordance with formal logic, the left-hand side and right-hand side of the mathematical expression describing the property of a system should be relate and belong to the qualitative determinacy of this system, i.e.,

(the qualitative determinacy of the system) = (the qualitative determinacy of the system).

The left-hand side and right-hand side of the mathematical expression describing the property of the element should be relate and belong to the qualitative determinacy of this element, i.e.

(the qualitative determinacy of the element) = (the qualitative determinacy of the element).

11. Both the quantitative and qualitative determinacy of the object must obey logical laws. Therefore, according to the logical law of identity, the left-hand and right-hand sides of the mathematical equation must belong to the same physical object (i.e. to the same property of the physical object or the physical model of the object). And,

according to the logical law of lack (absence) of contradiction, the left-hand and right-hand sides of the mathematical equation must not belong to different physical objects (i.e., to different properties, models).

12. The result of mathematical operations on physical quantities must have a physical meaning. Such mathematical operations are called admissible operations.

2. THE STARTING POINT OF THE CORRECT FOUNDATION OF CLASSICAL MECHANICS

Mechanics is the science of the mechanical movement and interactions of material bodies. The mechanical interactions represent such actions of bodies on each other, which lead to a change in speeds of these bodies, deformations or attractions of these bodies. Classical mechanics is based on three of Newton's laws which constitute the basis of mechanics.

The following questions arise: What is the cause (source) movement (as a change)? What are the essential features of the movement as the property of the interaction between the material objects?

2.1. KINEMATICS

As is known, kinematics is the part of mechanics, devoted to the study of the geometrical properties of the motion of material bodies without taking into consideration of their masses and forces acting on them. In other words, kinematics studies motion of material bodies without taking into consideration of causes of the motion. The main task of kinematics is the establishment (determination) of methods of representation of the motion of the material points or of bodies and the determination of the relevant kinematic characteristics of the motions (i.e., trajectory, speed, and acceleration of moving points; the angular velocity and the angular acceleration of the rotating bodies, etc.).

1. The motion of the material point can be given (represented) by one of three mutually complementary ways: vector, coordinate, and trajectory (natural) ways. The coordinate way (coordinate representation) is that the position of the point relative to the coordinate system (reference frame) is determined by certain three coordinates x, y, z (i.e., by the Cartesian coordinates x, y, z) and the law of motion is given by three equations (i.e., by x = x(t), y = y(t), z = z(t)). If one eliminates variable t from the equations, one can find the trajectory (i.e., line in the coordinate system) of the moving point. The trajectory (natural) way of describing is used if the trajectory of the moving point relative to the coordinate system (reference frame) is known. The position of the given point is determined by the distance between the reference point selected on the trajectory and the given point on the trajectory (the distance is measured along the trajectory). The law of motion is given by the equation expressing dependence of the traveled (traversed) distance on time: l = l(t). The basic kinematic characteristics of a moving point are the speed and acceleration of the point.

2. Clock C (i.e., a material device created by man) determines time t; time t characterizes clock C; time t is a property of clock C. Time t is the universal informational (i.e., non-physical) variable quantity [6, 13, 20, 38, 48, 49]. Therefore, time is not a property of natural material objects. The dimension of time is "second (s)". If t_0 and t_1 are the values of the variable quantity t (i.e., t_0 and t_1 are certain points of time), then the difference $(t_1 - t_0) \equiv \Delta t_{10}$ represents the fixed increment of the value of the variable quantity t from the value t_0 to the value t_1 . The difference $(t - t_0) \equiv \Delta t_0$ is the variable increment of the value of the quantity t from the value t_0 to some other value at that $\Delta t_0 \neq 0$.

3. The Cartesian metric coordinate system XOY is the metric material system formed by the identical material scales OX and OY on the plane [50, 73, 77-81, 89, 91-94]. Scales OX and OY have the dimension of "metre (m)". The material point M on the plane XOY represents a material object M. The set of possible positions (i.e., the geometrical states) of the object M in the system XOY is called geometric space of the states of the object M. (Description of the positions of the material object M in the system XOY is called geometrical states) are representation of the object M. The material object M and the material system XOY are the independent parts of the whole.

Clock *C* as a material object can be and move in the system XOY. The material object *C* and the material system XOY are the independent parts of the whole. But time *t* (as the property of clock *C*) does not exist in the system XOY: *t* does not represent a geometrical (material) object. Scale of time does not belong to the system XOY and does not represent an extension of the system XOY because time has no dimension of "metre (m)". The quantity which has no dimension of "metre (m)" cannot be graphically represented in the

system XOY [91-94]. In other words, the quantity which has no the dimension of "metre (m)" does not exist in the coordinate system XOY.

4. The positions of the material point (i.e., the material object) M on the plane XOY is determined by the coordinates (i.e., by the material projections, the segments of the scales) x^M and y^M which have the dimension of "metre (m)". (Coordinate is the geometric concept which designates certain segment of the scale. Description of the positions of the material point M in the system XOY is called geometric representation (coordinate representation) of point M). Material point M exists in the system XOY if and only if the coordinates of point M exists in the system XOY. There are no coordinates in general, but there exist only the coordinates of the material point M. The concepts "positions of material point M on plane XOY" and "coordinates of material point M on plane XOY" are identical ones. If point M move on plane XOY, then the coordinates of point M are functions of time: $x^M = x^M(t)$, $y^M = y^M(t)$.

5. If clock C is in system XOY and material object M has no effect on the clock mechanism, then property of clock C (i.e., time t) does not depend on the existence of object M. If property of clock C does not depend on clock positions in system XOY, then time t does not depend on rate of change in positions of the moving clock C in system XOY. Furthermore, time t does not depend on the length of the path traveled by moving clock C in system XOY.

6. If point M is moved on plane XOY, then the positions of the point M characterize the trajectory of the point M: the path (i.e., the material line on plane XOY) is the locus of the positions of point M. The length of the path (i.e., the length of the segment of line) traveled by point M over (for) time t is $l^{M}(t)$. The concepts of "segment" and "length of line segment" are not identical ones: the segment of the line is a material object, and the length of the segment of the line is a denominate (dimensional) number (i.e., property, the quantitative determinacy of the material object). The line segment exists on plane XOY, but the path length (as length of segment) do not exist on the plane XOY. In other words, there are only geometrical (i.e., material) objects on plane XOY: material points, material lines, and material figures on plane XOY. The path length (i.e., the quantitative determinacy of the line segment) is measured by the use of a device; measurement results are denominate (dimensional) numbers. In other words, the path length exists as a set of denominate (dimensional) numbers. The length l^{M} of the line segment has the dimension of "metre (m)", but the quantity l^{M} has no a graphical representation because l^{M} is not the material segment of the line on plane XOY.

7. The mathematical (i.e., quantitative) quantity l^M has the properties of additivity and multiplicativity, but it is not characterized by the property of directivity on the plane XOY. The property of additivity $l_1^M + l_2^M$ is geometrically (i.e., practically) interpreted as follows: two segments of straight line having lengths l_1^M and l_2^M are coincided with the scale X; origin of the first segment is coincided with the zero point of the scale X; the end of the first segment is connected with the origin of the second segment; the length of the connected segments is $l_1^M + l_2^M$. The property of multiplicativity $l_1^M \times l_2^M$ is practically interpreted as follows: the first segment of straight line having length l_1^M is coincided with the scale X; origin of the first segment is coincided with the zero point of the scale X; the second segment of straight line having length l_2^M is coincided with the scale Y; origin of the second segment is coincided with the zero point of the scale Y; the area of the rectangle constructed on these segments is $l_1^M \times l_2^M$; the quantity of the area does not exist in the system XOY because the quantity of the area has no the dimension of "metre (m)".

8. Measure of material object M represents the unity of qualitative and quantitative determinacy of object M. The measure of the material object M is invariant under transformation of coordinates. The length of path (i.e., property of line segment, measure of line segment) is invariant under transformation of coordinates. In other words, the length of path is independent of choice of coordinate system. The concepts of "direction", "direction of motion", and "vector" in system XOY represent the physical concepts (i.e., qualitative determinacy) and cannot be defined mathematically (i.e., in terms of quantity) in the system XOY [65-68, 70-75]. In physical point of view, there exists a direction of motion. But, in geometric and mathematical points of view, there are

only line segments and numbers. The length of the line segment (length of trajectory) is not characterized by a direction of motion, and the direction of motion does not determine the length of path. (Explanation is that the mathematical formalism does not contain motion as change in general. Changes are made by man. Vector is an illustration of direction).

Thus, the path length is independent of the direction of the motion of point M.

9. The quantity $l^{M}(t) - l^{M}(t_{0})$ is called increment of the length of the path of point M over (for) time $\Delta t_{0} \equiv t - t_{0}$ where $\Delta t_{0} \neq 0$, t_{0} is the initial time. The quantity

$$\frac{l^{M}(t) - l^{M}(t_{0})}{\Delta t_{0}} \equiv v^{M}(\Delta t_{0})$$

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is rate of change in the quantity l^{M} . In other words, speed of motion of point M is rate of change in quantity $l^{M}(t)$. (Movement is change in general). By definition, the speed of the motion of point M is the average speed over time Δt_0 . There is no "instantaneous speed" (i.e., speed at point of time t) [60]. The speed of the motion is the essential feature (property, characteristic) of motion: speed is the rate of the change in number. The rate of the change in the quantity $l^{M}(t)$ has no a graphical representation in system XOY because the quantity of the rate has no the dimension of "metre (m)". The rate of the change in the quantity $l^{M}(t)$ is not defined and is not characterized by any direction because the quantity $l^{M}(t)$ is not defined and is not characterized by a direction of the point M in the system XOY. Thus, the rate of the change in the quantity is not characterized by a direction of the motion of the motion of the point M.

10. The variable quantity $v^{M}(\Delta t_{0})$ takes on the values $v_{1}^{M}(\Delta t_{10})$, $v_{2}^{M}(\Delta t_{20})$, $v_{3}^{M}(\Delta t_{30})$ under Δt_{10} , Δt_{20} , Δt_{30} , respectively. If the interval (duration) of time is the variable quantity $\Delta t_{0} \equiv t - t_{0}$, then the quantity $v^{M}(\Delta t_{0})$ of the speed is a function of the argument $\Delta t_{0} \equiv t - t_{0}$. The conventional concept of speed at point of time (at instant of time) t (or at point of plane XOY) has no scientific and practical sense because the speed of the motion is determined by two (different) positions of the moving point M on plane XOY and by two (different) points of time: movement is change in general; but there is no change in position at point of time t (or at point of plane XOY).

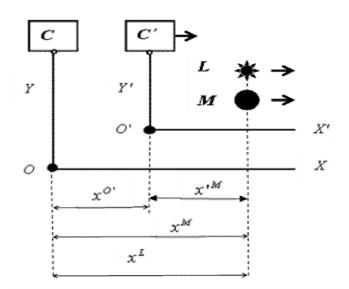
11. If the speed of the motion of point *M* depends on time, then the quantity $\frac{v^M (\Delta t_0) - v_1^M (\Delta t_0)}{\Delta t_0} \equiv a^M$

is called acceleration of the point M on the path length $l^{M}(t) - l^{M}(t_{0})$ where $v_{1}^{M}(\Delta t_{0})$ is certain value of speed, which is experimentally determined. Acceleration characterizes the motion of the point M: acceleration is the essential feature (property, characteristic) of the motion of point M. The quantity of the acceleration of the point M has no graphical representation in the system XOY because the quantity of the acceleration has no dimension of "metre (m)". The quantities $l^{M}(t)$ and a^{M} are connected by the following relationship: $l^{M}(t) - l^{M}(t_{0}) = a^{M} \times (\Delta t_{0})^{2}$.

12. Coordinate systems XOY and X'O'Y' represent the identical and mutually independent systems (Figure 1) if: (a) the unity of qualitative and quantitative determinacy of the system XOY is identical with the unity of qualitative determinacy of the system X'O'Y'; (b) connection between the systems XOY and X'O'Y' is only information ones. In other words, the coordinate systems XOY and X'O'Y' are the identical and mutually independent ones if: (a) XOY and X'O'Y' are the inertial systems; (b) the scales X, Y and X', Y' are identical ones; (c) the characteristics of the clocks C and C' are identical ones; d) there is no physical interaction between XOY and X'O'Y'.

If coordinate systems XOY and X'O'Y' are identical ones, then the system XOY is called "resting" system, and the system X'O'Y' is called "moving" system (Figure 1).

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1. Coordinate representation of moving material points L, M, and O' in the systems XOY and X'O'Y'. Systems XOY and X'O'Y' represent "resting" and ξ " systems, respectively; x are coordinates of points.

System X'O'Y' is in system XOY. In the case of one-dimensional motion, system X'O'Y' moves along the scale X. If some material object is in system X'O'Y', then this material object is also in system XOY.

13. If the identical systems XOY and X'O'Y' does not contain material objects, then the properties of the clocks C and C' are identical ones: $C \equiv C'$, $t \equiv t'$. In this case, the points O and O' can coincide at t = t' = 0. If $C \neq C'$ and the points O and O' coincide at t = 0, then t' can take the value t' = 0. But, in this case, $t \neq t'$ under t > 0.

If system XOY contains material objects but these material objects have no effect on the clock C, then these material objects have no effect on the clock C' as well: $C \equiv C'$, $t \equiv t'$. If material objects have an effect on the clock C' only, then $t \neq t'$ under t > 0. In this case, the systems XOY and X'O'Y' are non-identical ones. But this contradicts to the condition of identity of the systems XOY and X'O'Y'. Thus, the condition of identity of the systems XOY and X'O'Y'. Thus, the condition of identity of the systems XOY and X'O'Y'. This requirement represents the requirement of simultaneity of a certain event in the systems XOY and X'O'Y'.

14. It follows from Figure 1 that

(length of line segment x^{M}) = (length of line segment $x^{O'}$) + (length of line segment $x^{'M}$) where x^{M} , $x^{O'}$ and $x^{'M}$ are functions of time t. In this case, the following relationships are valid: (length of line segment x^{M})/t = (length of line segment $x^{O'}$)/t + (length of line segment $x^{'M}$)/t, $l^{M} = l^{O'} + l'^{M}$, $l^{M}/t = l^{O'}/t + l'^{M}/t$, $v^{M} = V^{O'} + v'^{M}$, $v'^{M} = v^{M} - V^{O'}$ $v^{M} - v'^{M} = V^{M} \equiv V^{O'}$

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where v^{M} is the speed of the object M in the system XOY; v'^{M} is the speed of the object M in the system X'O'Y'; $V^{O'} \equiv V^{M}$ is the speed of the relative motion of the systems XOY and X'O'Y'; $V^{M} \equiv V^{O'}$ is also the speed of the relative motion of the object M in the systems XOY and X'O'Y'. These relationships represent the correct formulation of the Galilean principle of relativity, i.e., the principle of relative motion of the speeds v^{M} , v'^{M} and $V^{O'} \equiv V^{M}$. The Galilean principle of relativity in the coordinate representation has the following form:

$$x'^{M}(t) = x^{M}(t) - V^{O'}t; V^{O'} \equiv V^{M}.$$

This relationship is called Galilean transformation.

15. The motion of the quantum (microscopic) objects differs essentially from the motion of the classical (macroscopic) objects. The principle of relative motion of the quantum (microscopic) object is formulated as follows [3-7, 21, 34, 48, 49]: the translational motion of a free quantum particle is the absolute motion, i.e., the speed of the motion of a free quantum particle does not depend on the choice of reference system because a free quantum particle cannot be at rest. In the case of light (i.e., a set of photons), this principle is formulated as follows: the speed of the light does not depend on the speed of the source or receiver of the light.

16. If the systems XOY and X'O'Y' contain the mutually independent physical objects L and M (Figure 1) moving with different speeds, then a description of the motion (kinematics) of the object L in the systems XOY and X'O'Y' is similar to the description of motion (kinematics) of the object M under the condition that the object L is not a microscopic object (for example, photon). If the object L represents photon (quantum particle, microscopic object), then the mutually independent objects L (microscopic object) and M (macroscopic object) are non-identical ones: $L \neq M$ because these objects have different qualitative determinacy. But this fact does not lead to violation of the condition of identity of the systems XOY and X'O'Y' because a photon has no effects on the scales X, Y, X', Y' and on the mechanisms of the clocks C, C'. In other words, $C \equiv C', t \equiv t'$ also in the case of motion of photon in systems XOY and X'O'Y'.

17. The mathematical formulation of the principle of relative motion of photon in the systems XOY and X'O'Y' has the following form:

$$v^{L} = v^{L}, v^{L} - v^{L} \equiv V^{L} = 0; v^{L}t = v^{L}t, l^{L} = l^{L}$$

where v^L and v'^L are the speeds of the motion of photon in the systems *XOY* and *X'O'Y'*, respectively; l^L and l'^L are the lengths of the paths traveled by the photon in the systems *XOY* and *X'O'Y'*, respectively. These relationships have the following form in the coordinate representation: $r^L - r'^L$ $r^L = v^L t$ $r'^L = v'^L t$.

$$x^{L} = x'^{L}, \quad x^{L} = v^{L}t, \quad x'^{L} = v'^{L}$$

$$v^{L} = v'^{L}, \quad v^{L} - v'^{L} \equiv V^{L} = 0.$$

Consequently, the correct formula of transformation of coordinates of photon in the systems XOY and X'O'Y' is as follows:

$$x^{L}(t) = x'^{L}(t).$$

The correct formula contains neither $V^{o'}$ nor t'. Thus, the motion of photon (quantum particle) obeys neither the Galilean relativity principle nor the mathematical formulations of the Lorentz relativity principle. This means that the Lorentz transformations represent a logical error [3-5, 10, 19, 20, 34, 38, 48, 49].

18. As is known, the Lorentz transformations are the result of the following mathematical operations:

(a) substitution of the Galilean transformation (in standard notations),

$$x'_{M}(t') = x_{M}(t) - V_{O'}t, \quad y'_{M} = y_{M}, \quad z'_{M} = z_{M}; \quad V_{O'} \equiv V_{M}; \quad t' \neq t,$$

into the equation of the front of the light wave in the system X'O'Y' (in standard notations),

$$x_{L}^{\prime 2}(t') + y_{L}^{\prime 2}(t') + z_{L}^{\prime 2}(t') = c^{2}t'^{2}; t' \neq t,$$

where c is the speed of the light (photons) in the systems XOY and X'O'Y';

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(b) finding of the conditions under which the equation of the front of the light wave in the system X'O'Y' is transformed into the equation of the front of the light wave in the system XOY,

$x_L^2 + y_L^2 + z_L^2 = c^2 t^2.$

The founded conditions are called Lorentz transformations and read as follows: the equation $x_L'^2 + y_L'^2 + z_L'^2 = c^2 t'^2$

is invariant under the Lorentz transformations. (The concept of "invariance" signifies that the equation describing the wave front has the identical forms in the systems XOY and X'O'Y').

19. Mathematical, physical meanings and logical sense of the Lorentz transformations become apparent in the following simple case. If $x_L(t) = ct$, $x'_L(t') = ct'$ are the equations of the motion of the photon in the systems XOY and X'O'Y', respectively, then the substitution of the "Galilean transformation", $x'_M(t') = x_M(t) - Vt$, $V \equiv V_{O'}$, $t' \neq t$, into the equations of the motion of the photon means that $x'_M(t') = x'_L(t')$, $x_M(t) = x_L(t)$. This substitution leads to the following standard relationships:

$$x_{M} - Vt = ct', \ ct - Vt = ct', \ t' = t\left(1 - \frac{V}{c}\right), \ t' = t - \frac{Vx_{L}}{c^{2}}.$$

But, in my view [3-5, 10, 19, 20, 34, 38, 48, 49], the Lorentz transformations are not free from the following objections.

OBJECTION 1

In formal-logical point of view, the relationship $x'_{M}(t') = x_{M}(t) - Vt$, $V \equiv V_{O'}$, $t' \neq t$ is not the Galilean transformation, $x'_{M}(t) = x_{M}(t) - Vt$, $V \equiv V_{O'}$, because $x'_{M}(t) \neq x'_{M}(t')$, i.e., $x'_{M}(t') \neq x_{M}(t) - Vt$, $V \equiv V_{O'}$, $t' \neq t$.

OBJECTION 2

In mathematical point of view, the relationships (i.e., substitutions) $x'_{M}(t') = x'_{L}(t')$, $x_{M}(t) = x_{L}(t)$ signify intersection of non-identical mathematical objects (i.e., equations) at any point of time. In physical point of view, these relationships signify: (a) coincidence of the mutually independent and non-identical material objects M and L (which are moved at different speeds!) at any point of time; (b) formation of the system M+L (i.e., formation of bond, formation of connection, formation of the material unity of objects M and L). In other words, the coincidence means that the coincident (bonded, connected) objects M and L are moved at different speeds at any point of time. But this contradicts to actual practice and, therefore, formal logic. In addition, it is contrary to the condition that the material objects M and L are mutually independent ones.

OBJECTION 3

By the condition, the systems XOY and X'O'Y' are identical ones: t = t'. But the substitution $x'_{M}(t') = x'_{L}(t')$, $x_{M}(t) = x_{L}(t)$, $t' \neq t$ leads to the following relationship:

$$t' = t \left(1 - \frac{V}{c} \right), \ t' \neq t \, .$$

This relationship contradicts to the condition of identity of the systems XOY and X'O'Y': t = t'. Really, the relationship $t' \neq t$ signifies connection of the independent material objects M and L. Thus, formal-logical error is that the binding (connecting, conjunction) of the independent material objects M and L leads to the effect (action) on the clock C' in the system X'O'Y' and does not lead to the effect (action) on the clock C in the system XOY.

The above objections lead to the following conclusion: the standard mathematical formulation of the Lorentz principle of relativity (i.e., the Lorentz transformations) is mathematical, physical, and formal-logical errors. The only correct formulation of the principle of relative motion of light in the coordinate representation is as follows:

$$x'_{L}(t') = x_{L}(t), \quad y'_{L}(t') = y_{L}(t), \quad z'_{L}(t') = z_{L}(t), \quad t' = t; \quad v'_{L} = v_{L} \equiv c.$$

Thus, the Lorentz transformations – the essence of the special theory of relativity – represent the gross error [3-5, 10, 19, 20, 34, 38, 48, 49]. Elimination of this error leads inherently to the abolition of the special theory of relativity.

2.2. DYNAMICS

As is known, dynamics is the part of mechanics devoted to the study of the motion of the bodies under action of the forces applied to them. In other words, dynamics studies the motion of the material bodies, taking into consideration of the cause of the motion (i.e., interaction between the bodies). The quantity of the interaction between the bodies is measured by the use of a dynamometer. (Dynamometer is the device for measurement of force, consisting of the force link (elastic element) and measuring indicator). The basic concepts of dynamics are mass and force.

1. Mass is the essential (fundamental) physical property (essential feature) of a material object: mass m is the amount of matter in the material object. The dimension of the mass is "kilogram (kg)". Mass is an additive physical quantity. The property of additivity of mass m^M of material object M is expressed by the following relationship: $m^M = m_1^M + m_2^M$ where m_1^M and m_2^M are the masses of the parts of the object M. Mass is not a multiplicative quantity: mass has no multiplicative property. Therefore, the expression $m_1^M \times m_2^M$ has no physical meaning and is an inadmissible expression in science.

2. Mass of a macroscopic object M does not depend on the positions of the object M in the system XOY. Therefore, the mass of the macroscopic object M is independent of the rate of change in the positions of the object M in the system XOY. The principle of independence of mass of macroscopic object M on the speed of the object M is formulated as follows: the mass and speed of the object M are mutually independent physical quantities. There is no logical relation between the concepts of mass and speed of object M in the special theory of relativity (Lorentz transformations) represents a formal-logical error [3-5, 10, 19, 20, 34, 38, 48, 49].

3. The product of mass and speed of the moving object M represents the essential physical property (essential feature) of the moving material object:

$$p^{M}(\Delta t_{0}) \equiv m^{M} \times v^{M}(\Delta t_{0})$$

where the physical quantity $p^{M}(\Delta t_{0})$ is called momentum of object M. The dimension of the quantity of the momentum is $kg m s^{-1}$. This definition of the momentum satisfies the formal-logical law of identity:

(property of the moving object M) = (property of the moving object M).

In addition, the definition of the momentum satisfies the formal-logical law of lack (absence) of contradiction:

(property of the moving object M) \neq (property of the moving object non-M)

4. The rate of change in the momentum of the moving object M represents the essential physical property (essential feature) of the motion of the material object. The rate of change in the momentum of the moving object M is defined as follows:

$$\frac{p^{M}(\Delta t_{0}) - p_{1}^{M}(\Delta t_{0})}{\Delta t_{0}} = m^{M} \times \frac{\left[v^{M}(\Delta t_{0}) - v_{1}^{M}(\Delta t_{0})\right]}{\Delta t_{0}}$$
$$\frac{p^{M}(\Delta t_{0}) - p_{1}^{M}(\Delta t_{0})}{\Delta t_{0}} = m^{M} \times a^{M}$$

where $p_1^M(\Delta t_0)$ is a certain value of the momentum, which is determined experimentally. The dimension of the quantity of the rate of change in the momentum is $kg \ m \ s^{-2}$. The dimension $kg \ m \ s^{-2}$ characterizes the qualitative determinacy of the quantity of rate of change in the momentum. The definition of the rate of change in the momentum of the moving object satisfies the formal-logical law of identity:

(property of the moving object M) = (property of the moving object M).

In addition, the definition of the rate of change in the momentum satisfies the formal-logical law of lack (absence) of contradiction:

(property of the moving object M) \neq (property of the moving object non-M)

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5. The interacting material objects represent a system. Force is the cause of changes in the system. Force is an essential physical property (essential feature, characteristics) of the material interaction of the objects. Force is a physical property of the structure (i.e., of the material connection of the elements) of the system. The qualitative determinacy of the structure (i.e., of the material connection) is not identical with the qualitative determinacy of the system. Therefore, the property of the structure (i.e., the property of the material connection) is not identical with the property of any element of the system. In other words, force (as the property of the material connection between of the interacting objects) does not represent a property of the interacting objects. The quantity of force is measured by the use of a dynamometer and has the dimension of "kilogram-force (kgf)". The dimension of "kilogram-force (kgf)" is the universal and independent dimension of force: this dimension does not depend on the type of interaction and cannot be reduced to another dimension.

6. If: (a) two material objects N, M and material connection D between objects N, M (i.e., D connects objects N and M) represent the system S = N + D + M (where the property of the material connection D is determined (measured) by a dynamometer); (b) the objects N, M interact in such a way that the object N is the cause of the motion of the object M at an acceleration a_M , – then the relationship between the force F^D (which is measured by the use of a dynamometer) and acceleration a_M represents the following proportion:

$$\frac{F^{D} - F_{1}^{D}}{F_{1}^{D}} = \frac{a^{M} - a_{1}^{M}}{a_{1}^{M}}, \quad \text{i.e.,}$$

$$F^{D} = \left(\frac{F_{1}^{D}}{a_{1}^{M}}\right) \times a^{M}, \quad F^{D} = \left(\frac{F_{1}^{D}}{m^{M} \times a_{1}^{M}}\right) \times \left(m^{M} \times a^{M}\right)$$

where F_1^D is a certain value of variable quantity F^D , which is the reading of the dynamometer; the quantity F^D characterizes the structure of the system and has the dimension of kgf; the quantity $(m^M \times a^M)$ characterizes the element M of the system and has dimension of $kg m s^{-2}$. The dimensions of kgf and $kg m s^{-2}$ characterizing the structure and element of the system have different qualitative determinacy and are non-identical ones:

(qualitative determinacy of force) \neq (qualitative determinacy of rate of change in momentum).

Therefore, the concept of force does not represent the system of concepts of "kilogram", "meter", and "square second". In other words, the concept of force and the concept of "rate of change in momentum" are in conflict with each other.

7. The correct relationships between quantity of force and some other physical quantities (such as length, mass, speed of material object) represent the proportions by quantity of force and some other physical quantities:

$$\frac{F^{D} - F_{1}^{D}}{F_{1}^{D}} = \frac{l^{M} - l_{1}^{M}}{l_{1}^{M}},$$
$$\frac{F^{D} - F_{1}^{D}}{F_{1}^{D}} = \frac{v^{M} - v_{1}^{M}}{v_{1}^{M}},$$
$$\frac{F^{D} - F_{1}^{D}}{F_{1}^{D}} = \frac{m^{M} - m_{1}^{M}}{m_{1}^{M}}.$$

Thus, force is a property of the material structure of the system of the material elements (material objects). This property of structure does not depend on the properties of the elements of the system.

8. Force as a property of the material connection of the elements of the system of the interacting objects can be depicted as follows:



Figure 2. Illustration of the material structure of the system of the interacting material objects N and M. The force of the interaction is a property of the structure (i.e., the property of the connection of the objects N and M). The arrows depict the directions of the force.

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The force of the interaction between two objects N and M is depicted as straight-line segment with two arrows at the endpoints. The two arrows show (indicate) the directions of the force. The endpoints of the segment represent the two points of application (apposition) of the force of the interaction: one end shows (indicates) the point of application (apposition) of the force to the object N, the other end shows (indicates) the point of application) of the force to the object M. The segment with only one point of application (apposition) of force and with only one arrow does not represent force in general and the force of the interaction because such segment has no physical meaning: force is always the force of the interaction. In other words, the interaction force is a single force,

$$F^{NM} \equiv F^{MN} \equiv F^{(\text{int eraction})},$$

which cannot be decomposed into two independent (opposite) components: the action force $F^{(action)}$ and the counteraction force $F^{(counteraction)}$. The action force does not exist without the counteraction force; the counteraction force does not exist without the action force. Mathematical expression

$$F^{NM} - F^{MN} \equiv 0$$

signifies the complete extermination (or absence) of the interaction force, i.e.,

$$F^{(\text{int eraction})} \equiv 0.$$

Therefore, the standard relationship

$$\vec{F}^{(action)} = -\vec{F}^{(counteraction)}$$

represents an error.

9. In the dialectical point of view, the force of the interaction of the material objects N and M represents the unity of opposite aspects: action and counteraction. The unity of opposites does not mean the identity of opposites because opposites have different qualitative determinacy.

10. In formal-logical point of view, the concepts of "action" and "counteraction" are dissenting concepts. There are no relation of identity, relation of subordination, and relation of partial coincidence between these concepts. The logical relation between the concepts of "action" and "counteraction" is the relation of disagreement: one concept eliminates another concept; both the concepts cannot be applied to the same objects. (For example, the concept of "action" characterizes the active object N, the concept of "counteraction" characterizes counteracting object M). These concepts are subordinate and contradictory ones: the scopes (volumes) of these two concepts enter into the scope of another – more general – concept of "interaction" as a "unity of opposites". Therefore, the concepts of "action" and "counteraction" are connected by the formal-logical law of lack (absence) of contradiction:

 $(action) \neq (counteraction).$

The relationship

 $F^{NM} \equiv F^{MN} \equiv F^{(\text{int eraction})}$

satisfies the formal-logical law of identity:

(*interaction force*) = (*interaction force*).

Consequently, the standard assertion that

(action force) = (interaction force)

represents violation of the formal-logical law of lack (absence) of contradiction. Thus, Newton's doctrine of force is incorrect.

2.3. THE LAW OF GRAVITATIONAL INTERACTION

If interaction between material objects A and B represents the gravitational interaction, then one must consider the complete system $S = A + G^{AB} + B$ (Figure 3) within the framework of the system approach (i.e., within the framework of the unity of formal logic and of rational dialectics).

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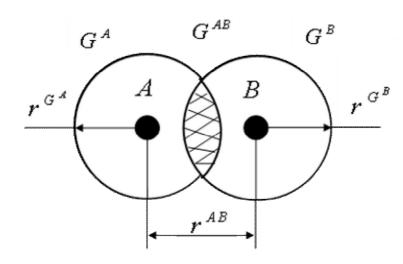


Figure 3. The gravitational interaction of the macroscopic objects A and B. Material objects G^{A} and G^{B} are the gravitational fields of the objects A and B; material object G^{AB} (shaded region) is the region of the overlap of the gravitational fields G^{A} and G^{B} .

The system analysis consists in the following steps: detection of the elements of the system; detection of the connections between the elements; and finding of relationships between the physical quantities characterizing elements and connections.

1. Physical quantities relating to Figure 3 are defined as follows:

(a) the macroscopic material objects A and B represent the elements of the complete system $S = A + G^{AB} + B$;

(b) r^{AB} is the distance between macroscopic objects A and B;

(c) the macroscopic material objects G^A and G^B are the gravitational fields of the objects A and B, respectively;

(d) r^{G^A} and r^{G^B} are the radii of the gravitational fields G^A and G^B , respectively;

(e) the relationship $r^{AB} < r^{G^A} + r^{G^B}$ is a necessary condition for the gravitational interaction;

(f) the macroscopic material object G^{AB} (i.e., the shaded region) represents the region of the overlap of the gravitational fields G^{A} and G^{B} ;

(g) G^{AB} is the structure of the system; (in other words, G^{AB} is the material element which connects the objects A and B);

(h) G^{AB} is a carrier of the gravitational interaction (the force interaction);

(i) the force of the interaction is a property of the structure G^{AB} .

2. The relationships between the physical quantities characterizing elements and connections in the complete system $S = A + G^{AB} + B$ can be defined in the following heuristic way:

a) the force interaction between the material objects A and B exist if $r^{AB} < r^{G^A} + r^{G^B}$; the force interaction between the material objects A and B do not exist if $r^{AB} > r^{G^A} + r^{G^B}$;

b) mass is a property (attribute) of the gravitational field; the gravitational fields G^A and G^B are characterized by the masses m^{G^A} and m^{G^B} ;

c) the masses m^{G^A} and m^{G^B} of the gravitational fields G^A and G^B are directly proportional to the masses m^A and m^B of the objects A and B, respectively;

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d) the mass $m^{G^{AB}}$ of the region of overlap of the gravitational fields G^{A} and G^{B} is directly proportional to the sum $(m^{A} + m^{A})$:

$$m^{G^{AB}} \propto (m^A + m^B);$$

e) the mass $m^{G^{AB}}$ increases under decrease of the distance r^{AB} :

$$m^{G^{AB}} \propto \exp\left(-\frac{r^{AB}}{r^{G^{A}}+r^{G^{B}}}\right).$$

(Remark: Inverse proportional function y = 1/x is not manifested (i.e., graph does not exist) in the metrical system *XOY* because y has no dimension of length ("metre") if x have the dimension of length ("metre") [89-94]. In addition, y is an unbounded function which has no physical meaning);

f) the force $F^{G^{AB}}$ of the gravitational interaction is directly proportional to the mass $m^{G^{AB}}$: $F^{G^{AB}} \propto m^{G^{AB}}$

3. Within the framework of the system approach, the heuristic assertions lead to the following system of three proportions:

$$\frac{F^{G^{AB}} - F_{1}^{G^{AB}}}{F_{1}^{G^{AB}}} = \frac{m^{G^{AB}} - m_{1}^{G^{AB}}}{m_{1}^{G^{AB}}};$$

$$\frac{F^{G^{AB}} - F_{1}^{G^{AB}}}{F_{1}^{G^{AB}}} = \frac{\left(m^{A} + m^{B}\right) - \left(m_{1}^{A} + m_{1}^{B}\right)}{\left(m_{1}^{A} + m_{1}^{B}\right)};$$

$$\frac{F^{G^{AB}} - F_{1}^{G^{AB}}}{F_{1}^{G^{AB}}} = \frac{\exp\left(-\frac{r^{AB}}{r^{G^{A}} + r^{G^{B}}}\right) - \exp\left(-\frac{r_{1}^{AB}}{r_{1}^{G^{A}} + r_{1}^{G^{B}}}\right)}{\exp\left(-\frac{r_{1}^{AB}}{r_{1}^{G^{A}} + r_{1}^{G^{B}}}\right)}$$

where:

 $F_1^{G^{AB}}$ is a certain value of the force of the gravitational interaction; $m_1^{G^{AB}}$ is a certain value of the mass of the region G^{AB} of the gravitational interaction; m_1^A and m_1^B are certain values of the masses of the objects A and B, respectively; r_1^{AB} is a certain value of the distance between the objects A and B; $r_1^{G^A}$ and $r_1^{G^B}$ are certain values of the radii of the gravitational fields of the objects A and B respectively. These values of the physical quantities are determined experimentally. The system of the proportions represents a system of mutually complementary relationships which satisfy the formal-logical and dialectical laws.

4. The system of the proportions leads to the following system of three mutually complementary (mutually additional) mathematical formulations of the law of gravitation:

$$F^{G^{AB}} = \left(\frac{F_1^{G^{AB}}}{m_1^{G^{AB}}}\right) m^{G^{AB}},$$

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$$F^{G^{AB}} = \left(\frac{F_1^{G^{AB}}}{m_1^A + m_1^B}\right) (m^A + m^B),$$

$$F^{G^{AB}} = \left[\frac{F_1^{G^{AB}}}{\exp\left(-\frac{F_1^{G^{AB}}}{r_1^{G^A} + r_1^{G^B}}\right)}\right] \exp\left(-\frac{r^{AB}}{r^{G^A} + r^{G^B}}\right).$$

The law of gravity can be expressed in the following equivalent form:

$$F^{G^{AB}} = \left(\frac{F_{1}^{G^{AB}}}{m_{1}^{G^{AB}}}\right) m^{G^{AB}},$$

$$m^{G^{AB}} = \left(\frac{m_{1}^{G^{AB}}}{m_{1}^{A} + m_{1}^{B}}\right) (m^{A} + m^{B}),$$

$$m^{G^{AB}} = \left[\frac{m_{1}^{G^{AB}}}{\exp\left(-\frac{r_{1}^{AB}}{r_{1}^{G^{A}} + r_{1}^{G^{B}}}\right)}\right] \exp\left(-\frac{r^{AB}}{r^{G^{A}} + r^{G^{B}}}\right).$$

(Remark: The system of the proportions is analogous (but not identical) to the following differential form:

$$dF(M, R) = \left(\frac{\partial F}{\partial M}\right)_{R} dM + \left(\frac{\partial F}{\partial R}\right)_{M} dR$$

where $M \equiv m^A + m^B$, $R \equiv r^{AB}$ are the arguments of the function F = F(M, R). The difference between the differential form and the system of the proportions is that the differential and integral calculus is a false theory [52-55, 57, 61, 89, 90-94]).

5. As is well known, the empirical formulation of Newton's law of gravitation is as follows:

$$F^{AB} = \gamma \frac{m^A m^B}{(r^{AB})^2}$$

where γ is the gravitational constant. But Newton's formulation is not free from the following objections:

a) the quantity $(m^A m^B)$ has no physical meaning because: the quantity $(m^A m^B)$ does not represents a property (feature) of material object; in accordance with practice, mass of an object is a additive (not multiplicative) quantity;

b) quantities $1/(r^{AB})$ and $1/(r^{AB})^2$ are not manifested (i.e., graph does not exist) in the metrical system *XOY* [89-94] because these quantities have no dimension of length ("metre"); quantity $(r^{AB})^2$ is an area of the surface of non-existent material object. (What is this material object?). But the area of a surface does not characterize a distance.

Thus, Newton's law of gravitation is incorrect because it does not satisfy the formal-logical and dialectical laws

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4. DISCUSSION

1. As is known, formal logic is the general science of the laws of the correct thinking, thought. The laws of formal logic represent the theoretical generalization and reflection of practice in the human consciousness. Consequently, formal logic exists in the human consciousness and practice. Practice is a criterion of validity (trueness, truth) of formal logic.

2. Dialectical materialism is the general science of the most common (general) kinds of connections and the laws of development of nature, of human society, and of thinking, thought. The laws of dialectics represent the theoretical generalization and reflection of practice in the human consciousness. Consequently, dialectics exists in the human consciousness and practice. Practice is a criterion of validity (trueness, truth) of dialectics.

3. The only correct methodological basis of sciences is the unity of formal logic and of rational dialectics. Theoretical physics and mathematics are sciences if and only if its foundations are formulated within the framework of the correct methodological basis.

4. As is well known, science originated in the ancient world in connection with the requirements of social practice and had quick development since 16-17-th ages. In the course of historical development, science changed into a productive force and into the most important social institution which has a significant impact on all spheres of society. Today, science is a huge sphere of human activity aimed at obtaining new knowledge and theoretical systematization of objective knowledge about reality. Sum of objective knowledge underlies the scientific picture of the world. The scientific picture of the world plays an important world-outlook role in the development of the human society.

5. Science is developed in the inductive way, i.e., in the way of "negation of negation". Therefore, the extensive and revolutionary periods are alternated in the development of science. The scientific revolutions lead to a change in the structure of science, in the cognition principles, in the categories and methods, as well as in the forms of organization of science.

Inevitability of the scientific revolutions for the first time was emphasized by A. Einstein: "progress of science will be the cause of revolution in its foundations". Also, the following statement is true: the critical reassessment of the standard foundations of science leads to the progress of science. These aspects in development of science are characterized, for example, by A. Einstein's words: "There has been formed the notion that the foundations of physics were finally established and the work of a theoretical physicist should be to bring a theory in correspondence with all the time increasing abundance of the investigated phenomena. Nobody thought that a need for radical rebuilding of the foundations of all physics could arise. Our notions of physical reality never can be final ones". At present, the validity of Einstein's assertion is confirmed by the poor states of sciences.

In this connection, the problem of critical analysis of the foundations of theoretical physics and of mathematics within the framework of the correct methodological basis (i.e., the unity of formal logic and of rational dialectics) arises. This methodological basis represents the system of logical laws and of general-scientific methods of cognition of reality: observation and experiment, analysis and synthesis, induction and deduction, analogy and hypothesis, logical and historical aspects, abstraction and idealization, generalization and limitation, ascension from concrete concepts to abstract concepts, comparison, modeling, etc.

6. The necessity of application of general-scientific methods for the critical analysis of theoretical physics and of mathematics is also stipulated by the fact that the foundations of theoretical physics and of mathematics contain vagueness which cannot be clear comprehend and formulated in the standard physical and mathematical terms because physics and mathematics do not contain many universal (general-scientific, philosophical) concepts; moreover, origin of vagueness is often manifestation of "thoughtless use of mathematics" (L. Boltzmann). In this case, formal-logical errors exist and come into mathematics and natural-scientific theories so far. In my opinion, the errors in theoretical physics and mmathematics are the inevitable consequence of the inductive method of cognition.

This gives possibility to elicit, to reveal, to recognize errors done by the great scientists of the past time. Deletion of the errors leads to the abolishment (elimination) of a set of standard theories. But even the mistakes done by the great scientists contribute to progress in science: "false hypotheses often rendered more services than the true ones" (H. Poincare) because mistakes extend the consciousness of scientists. Such is the dialectics of truth and of lie in science. Today this fact signifies that one should call the great scientific achievements in question within the framework of the correct methodological basis: the unity of formal logic and of rational dialectics.

CONCLUSION

Thus, the correct scientific analysis of the generally accepted foundations of classical mechanics is possible only within the framework of the correct methodological basis: the unity of formal logic and of rational dialectics. The results of the scientific-critical analysis are as follows.

1. The following correct starting point of kinematics is proposed:

a) the concept of time: time does not represent a physical or geometrical quantity; time is the independent information quantity; a clock determines time; time characterizes a clock;

b) the concept of motion of the material point in the geometrical system of coordinates: motion of the material point in the geometrical system of coordinates is changes in the positions (states) of the material point in the geometrical system of coordinates; the concepts of "direction", "direction of motion", and "vector" represent the physical concepts and cannot be defined mathematically or geometrically;

c) the concept of speed of particle in the geometrical system of coordinates: the speed of the material point is the average rate of change in the length of the path traveled by material point for a certain interval of time; the speed at a certain point of time or at a certain point of coordinate system is an inadmissible concept because there is no motion of particle at a certain point of time or at a certain point of coordinate system;

d) the concept of acceleration of material point in the geometrical system of coordinates: the acceleration of the material point is the average acceleration over a certain interval of time;

e) the concept of inertial systems of coordinates: the inertial geometrical systems of coordinates are the identical systems; rate of clocks in the identical systems does not depend on the speed of the relative motion of the systems of coordinates;

f) the principle of motion of quantum particle (photon): the motion of the quantum particle (photon) is the absolute motion, i.e., the motion of the quantum particle (photon) does not depend on the speed of the relative motion of systems of coordinates; the motion of the photon in the inertial geometrical systems does not obey the Lorentz principle of relativity; Lorentz transformations – the essence of the special theory of relativity – represent the mathematical, physical, and formal-logical errors.

2. The following correct starting point of dynamics is proposed:

a) the principle of independence of the mass of the object on the macroscopic speed of the object: the mass of the macroscopic object does not depend on the positions of the object in the geometrical system of coordinates; consequently, the mass of the macroscopic object is independent of the speed of the change in the positions of the macroscopic object in the geometrical system of coordinates; the mass and speed of the macroscopic object are the independent physical quantities; dependence of the mass of the macroscopic object on the speed of motion of the macroscopic object represents a logical error in the special theory of relativity;

b) the definition of force: force is the essential property (essential feature, characteristic) of the material interaction of objects; force is the physical property of the structure (i.e., a property of the material connection of the elements) of the system of the interacting objects; force does not represent a property of the interacting objects; the quantity of force is measured using a dynamometer and has the dimension of "kilogram-force (kgf)"; dimension of "kilogram-force (kgf)" does not depend on kind (type) of interaction and cannot be reduced to another dimension;

c) the principle of existence and of uniqueness of force: force is the force of the interaction between objects; the force of the interaction of objects represents a single force which cannot be decomposed into two independent components: the force of the action and the force of the counteraction.

3. The following correct formulation of the law of gravitation is proposed:

a) the gravitational interaction between two material objects is researched within the framework of the system approach; the gravitational interaction is the effect (corollary fact) of the existence of the region of overlap (superposition, intersection) of the gravitational fields of the material objects; the region of overlap (superposition, intersection) of the gravitational fields of the material objects represents a material connection (structure), i.e., a material object;

b) the formulation of the law of gravitation represents the system of three proportions: the proportion by relative increment of the force of the gravitational interaction between two material objects and relative increment of the mass of the region of overlap (superposition, intersection) of the gravitational fields of two material objects; the proportion by relative increment of the force of the gravitational interaction between two

material objects and relative increment of sum of the masses of the two material objects; the proportion by relative increment of the force of the gravitational interaction between two material objects and relative increment of the distance between two material objects;

c) the empirical formulation of Newton's law of gravitation represents the formal-logical and dialectical errors. The main errors in Newton's formula are as follows: product of the masses has no physical meaning; square of the distance is the area of the surface of a non-existent material object.

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USE OF SOCIAL MEDIA TO BOOST EMPLOYEE ENGAGEMENT

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ABSTRACT

Social media has totally changed the business and communication picture and organizations are reluctant towards accepting the changes. The new technology provides a basis for organisation to use social media in its different aspects of working. This paper attempts to understand the concept of employee engagement in reference to the use of social media usage within and outside the organisation. The paper is based on the previous research carried out to know the impact of social media on employees' engagement level and to understand as how the internal social media usage can affect both existing and potential employees.

Keywords: Social media, employee engagement, Social networks and human resource

INTRODUCTION

Employee engagement has a gained a lot awareness as it is essential element for a successful and efficient business performance as hire the engaged employees are consider *as 'backbone of good working environments where people are industrious, ethical and accountable'* (Levinson, 2007a; Cleland et al, 2008).engagement affects the different attributes like absenteeism, turnover as well as it has connection with productivity and performance (Hemsley Fraser, 2008, cited in The HR Director, 2008; The Conference Board, 2006). Developing an environment that engage employees in their work will help employees to give their beat and go an extra mile to achieve organization objectives.

Social media has increased importance in the organization for a varied business purposes (Mark et al., 2014). Gartner stated that social media will change the communication and data-sharing process in organisation (Gartner, 2013). Over time it clearly states that social media is a focal point for every aspect. The new technology invention and the expanding possibilities of internet has ensured that such evolving technologies like social media, are gaining entry into the workplace. Use of social media for business provide many ways not only to attract and retain employees but provide an environment of collaboration for improving business. Employees are usually active on their different social network platforms so to communicate with the employees the employer has to follow the same path. Employee engagement is what that is created with the desire and opportunity for employees to connect with colleagues and managers. (MacLeod and Clarke, 2009: 8). One of the way through which organizations social media networks create engagement is known as social capital. Social capital is defined by Nahapiet and Ghoshal (1998: 243) as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit. Social capital thus comprises both the network and the assets that may be mobilized through that network." (Ellison et al., 2007: 1145-46). The objective of the paper is to state the importance of social media in creating employee engagement. It state that the organizations have to move forward to undertake social media as a tool to boost the employees engagement.

LITERATUTRE REVIEW UNDERSTANDING EMPLOYEE ENGAGEMENT

Employee engagement is a level a commitment an employee has towards the organization and its value. An engaged employee is one who is tremendously committed and motivated to work and improves his performance in order to fulfil organization goals. On the other hand, employer knows that a happy and motivated employee is more productive and to retain talent one has to engage employees for long term. Thus, employer need to respond to this sense of engagement by developing practices and process that work towards the benefit of employee, as it's a two-way relationship (Robinson et al, 2004). Caldwell and Fairhurst (Towers Watson Consultants) define 'Engagement' as - "employee's willingness and ability to contribute to business success the extent to which they put discretionary effort into their work and contribute more of their energy, creativity and passion on the job." Engagement is most of the time get confused with satisfaction as both are related to motivation, participation and commitment. Though Erickson (2005) describes that, "engagement is above and beyond simple satisfaction with the employment arrangement or basic loyalty to the employer-characteristics that most companies have measured for many years. Engagement, in contrast, is about passion and commitment—the willingness to invest oneself and expend one's discretionary effort to help the employer succeed." According to Robinson "engagement is positive attitude held by the employee towards the organisation and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organisation. The organisation must work to nurture,

maintain and grow engagement, which requires a two-way relationship between employer and employee" (Robinson et al., 2004: 9).

Employee engagement has been an important topic for both consultants and researchers in recent years (Gatenby et al., 2009: 2; Saks, 2006: 600). The relevance between the business outcome and the employee engagement has been the reason behind the increasing researches related to employee engagement (Kular et al., 2008: 6). Employee engagement has been described as personal engagement as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn (1990), (p. 694). However, Gatenby et al. (2008) and Gill (2012) stated that employee engagement is indefinable. Many studies has defined employee engagement and to understand the cause and effects of employee engagement.

OBJECTIVES

- Examine the use of social media for engagement with existing and potential employees.
- To understand that social media as a tool to form collaborations and communities for knowledge sharing and as a better way of communication.

RESEARCH METHODOLOGY

This paper used the review of literature of previous researches to reach the objectives of the study. All the social media and employee engagement related articles, research papers and publications were recognized and the references mentioned in the same were also gone thoroughly. To draw conclusion keywords of Social media, employee engagement, Social networks and human resource were used to search the related content and other information from Google scholar and other research database portals.

The research started with understanding employee engagement and relating it to the employee engagement and commitment. It was followed by analysing the social media in reference to building communities and as a way of communication. In addition, previous paper was used to draw establish connections which helped in framing our conclusion and analysis.

SOCIAL MEDIA AND SOCIAL NETWORKS

'Social Media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of User Generated Content' (Kaplan and Haenlein, 2010). The social media is based on three constructs user-generated content, communities of intrest and web 2.0. YouTube, Flickr, Slideshare, Scribd etc. are the Content communities in the Social Media space that allow users to upload content and share it across the community and spreading the concept. While there are other most user-friendly social Networking sites like Facebook, LinkedIn,Big Adda etc. which allow users to interact with its chat platform as well as unable to share picture , videos and other information. Social media has a broad definition which was explained by Bowely, "collaborative online applications and technologies which enable and encourage participation, conversation, openness, creation and socialization amongst a community of users". Communities of interest in social media creation of groups having a shared interest such as career, cultural or political inclination. This leads to the interaction between people, creating, sharing, exchanging and commenting in virtual communities and networks.

SOCIAL MEDIA TO BUILD BETTER EMPLOYEE ENGAGEMENT

A survey by Hotsuite digital stated that 84% of employees still receive company updates through email and company intranet, yet 74% of these respondents still feel that they are in the dark and left out of important company news and announcements. Thus, it's better to communicate with employees where they are active most of the time.

According to a survey by McLean et al. (1991), the starting months of service are critical in the growth of commitment; it is the time when new employee tries to find out how well the job meets his or her potentials. Earlier study concluded that MIS alumni joining a new position has some expectations (i.e., challenging tasks, promotional opportunities, good environment) and when organizations stand upto those expectations, employees loyalty and commitment towards organisation increases (McLean et al. Gonzalez et al. Internal Social Media's Impact on Socialization and Commitment Thirty Fourth International Conference on Information Systems, Milan 2013 7 1991). Thus, it the organization responsibility to meet new employees' expectation and reduce the uncertainty level by curtailing other factors such as role conflict or role ambiguity so as to eradicate negative impacts on new hires' performance and retention (King and Sethi 1998). Because information acquisition is directly related towards work and commitment (Ostroff and Kozlowski 1992), social media usage has the direct impact on employees working which directly affect organizational commitment too.

Affective commitment is an emotional attachment that personifies employees who strongly get involved in, and enjoy being a part of the organization (Allen and Meyer 1990). Employees who have higher level of commitment and develops an association with their co-workers are likely to feel an emotional attachment. Employees remain associated with those organization which provides them better environment and value their views and prove up to their expectation (Meyer and Allen 1991). Enduring commitment showcase the perceived costs that is associated with parting from the organization (Meyer and Allen 1991). According to Commitment is a continual engagement activity and a discontinuation in such events results in a loss of all the time and work done in training of employee (Becker,1960). If organizations prove up to the point of employee's expectation and providing a culture that embraces social media and an effective working environment that establish a sense of work-life balance then an employee is likely to identify a perceived cost involved in an external job switch. Employees are using social media to build relationships, to become more engaged, to develop a sense of community, and to be more productive (DiMicco et al. 2008; Koch et al. 2012; Leidner et al. 2010; Majchrzak et al. 2009; Smith 2011). Organization are now a day perceiving the social media culture to connect with employees and increasing their commitment level.

When an employee senses that the organization has gone beyond the norm to provide an effective and employees friendly working environment, and in a way better understand his or her role then an employee gain confidence, and give his best towards his work and before leaving the organisation he will consider all this and can lead to change in his decision. Social media is a selling point for organizations trying stimulate the talent towards organisation. New hires will be able to use social media to contribute, participate and engage for organizational purposes (Bradley 2011). New employees using the social media tool to acquaint with new knowledge that they require to finish their task. By continual social media use for purposes of achieving job related outcomes, new hires may learn to value the investment made on them and determine that their commitment to the organization is a sense of obligation. Social media can help in enhancing the employee engagement level when it is related to the organizations culture and its long-term objectives.

RESULTS AND DISCUSSION

The growing trend of social media has helped to develop a platform for employers to boost their employees' engagement level. From employees' perspective, it is an easy way to connect with other co-workers and to gain knowledge about their work on the basis of information available. If employees consider that employer is proving up to its expectation then it develops a sense of commitment or employee feel engaged towards the organization. As well the internal social media usage has its own perspective in building employee engagement.

CONCLUSION

The study has helped in understanding that the social media plays a crucial role in employee engagement. It states that if the internal social media usage is used effectively then it can bring some positive effect in employees behaviour and commitment level. The paper provides indicate that the way in which social media is used by the organisation it can help in engaging the present as well as potential employees. In addition, providing a better working environment and culture too play a crucial role in building up the engagement level among employees.

The paper is based on the review of studies conducted on the use of social media in building employee engagement. For future research, a qualitative tool backed up with questionnaire or survey method can be used to understand it in better way, furthermore we were unable to measure multiple other dimensions of social media like time spent or task completed. Further research can consider other aspects too and can take a sample of larger number of employees to draw conclusions.

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CRITICAL EVALUATION OF POWER CRISIS IN STATE OF HARYANA, INDIA

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"No nation can be aspiring to be modern and developed without electricity.....No modern machinery can run without uninterrupted and quality powerImagine New York, London or Tokyo for just one day without power supply...It could bring down Governments."

Former President Dr. A.P. J. Abdul Kalam Azad

ABSTRACT

Present study aims at analyzing the power situation in state of Haryana to find the imbalance (if any) in power supply and demand, regional discrimination in supply, chargeable power rate and power theft. Further study also evaluates the power condition of two different government tenures. Being study descriptive as well as empirical in nature, it went through the data collection of 200 people via structured questionnaire at five point rating scale and analysis with variance analysis using t-test and F-values. Study finds that power crisis exists in state of Haryana with the discrimination of supply rate, charging rate and power theft as well between rural and urban areas.

Keywords: Power, Crisis, Discrimination, Government, Haryana.

INTRODUCTION

The July 2012 India blackout was the largest power outage in history, occurring as two separate events on 30 and 31 July 2012. The outage affected over 620 million people, about 9% of the world population, or half of spread across Northern, India's population, 22 states in Eastern, and Northeast India (http://en.wikipedia.org/wiki/2012_India_blackouts). In Northern zone the Haryana is being majorly affected by this power shortage. As facts and figures say that Haryana state is witnessing power crisis of 200 lakh units per day as compared to the demand for power at 1600 lakh units. Various categories of power consumers in the state have been witnessing long power cuts due to the crunch. Meanwhile, the 210 MW Unit- 6 of Panipat Thermal Power Station (PTPS-2) of Harvana Power Generation Corporation Ltd (HPGCL) attained record generation of 1582-lakh units power in June this year, said Anurag Agarwal, Managing Director of HPGCL

In a statement here on June 03, 2012 Chautala claimed that on one side Harvana is facing acute power shortage and on other hand Hooda Government had written a letter to the Centre, the Power Ministry for diverting the available power (state's share) from Jhajjar Power Project to other states with the plea that Haryana has sufficient and surplus power for its needs. Wherever public views are totally contrasted to Bhupinder Singh Hooda (Chief Minister, Haryana) statement, they said that they are facing a keen shortage of power, particularly in rural areas, further there is also discrimination in supply of power within the different villages. On 4 June, 2013, Central Electricity Authority reported its latest estimates that the power demand in financial year 2013-14, Haryana is 44700 million units (MU) against availability of 51556 MU, while in Punjab power demand is 50850 MU against availability of 40819 MU. Last year Haryana faced power shortage of 7.7% while Punjab faced shortage of 5.3 %. In the year 2014, Bhartiya Janta Party became the ruling party with the promise to public in its manifesto that party will provide 24 hours power supply but on 6th June, 2015, Haryana chief minister told to INAS that they are not in the position of supplying the power 24 hours at least in current ruling period but surely they will improve the current position. Obviously this statement of chief minister disappointed the public and confirmed the power crisis exists in Haryana. Now question arises what's the truth behind such contrasted views / statements about the power supply in Haryana? Need to find the answer of this question initiated the researcher to make a study on topic.

OVERVIEW OF SITUATION OF POWER SUPPLY HARYANA

Following quotes of various people concerned to power sector in different manners either politically or otherwise, shows the present situation power supply in Haryana.

Haryana Power Minister Ajay Singh Yadav said state farmers would not face any shortage of power supply during the paddy sowing season and if needed, the power would be purchased from other states .[Jagran post, 25 May 2012.]

The Haryana power official though rising demand for electricity has resulted in short supply at many places but efforts are being made to meet the unexpectedly increased demand by purchasing power from different sources.

The people in rural areas have also resorted to road blockades and locking of power stations at many places in last some days.[Deepender Deswal, Times of India, Jul 2, 2012]

Haryana is reeling under severe power crisis as two units each of the generation plants at Yamunanagar and Jhajjar are dysfunctional. One unit each of Panipat and Khedar plants are also closed now, adding to the state's power woes. Farmers are also badly hit as they are not able pump water from wells during this paddy-sowing season. [Times of India, Jul 25, 2012]

In the backdrop of protests against the acute power crisis in Haryana, Chief Minister Bhupinder Singh Hooda today said it was not only his state but the entire country which was facing a power crisis [Outlook India.com, Jul 04, 2012]

Punjab and Haryana are heading for a major power and water crisis as the water level at the Bhakra and Pong dams has hit an alarming low, [Rohit Mullick, Times of India, Jul 1, 2012]

The dharna and protest by the Gorakhpur village against the proposed nuclear power plant on Wednesday entered the 200th day. Under the leadership of Kisan Sangharsh Samiti president Hans Raj Siwach dharna against the proposed Nuclear Power Corporation of India Limited (NPCIL) is being staged outside of the mini-secretariat here in Fatehabad. "The government issued notice to us for acquisition of our land, but we won't let them take it away for nuclear power. [Bhaskar Mukherjee, Times of India, March 3, 2011]

The severe coal shortage that led to power production crisis in the state is expected to ease in the coming days. Sanjeev Kaushal, MD, Haryana Power Generation Corporation Limited (HPGCL) on Wednesday said the crisis continues but there has been an improvement in the situation. [**The Indian Express, Oct 20, 2011**]

Presently, the demand for power/ electricity is about 6,000 Megawatts but it is likely to increase to 7,000 megawatts in the month of June and 8,000 megawatts in July month. [Bhupinder Singh Hooda, chief minister, Haryana, 2 June, 2013]

We will not be in a position to provide 24-hour power supply in at least our current tenure, but we may do it in our second tenure and will surely review the present situation [Manohar Lal Khattar, Present Chief Minister of Haryana, told *IANS*, 6 June, 2015].

Haryana is stumbling under power crisis, BJP government is in busy renaming the cities. Power problem was not there in congress tenure i.e. 2005-10.It indicates the downturn of present government.[Bhupinder Singh Hooda, 5 May, 2017]

In a statement, INLD general secretary Ajay Chautala alleged that cheat quality equipments made in China were used in setting up these power plants which had caused the power shortage. The INLD activists had even staged protests demonstrations at these power plants on July 4 alleging that the poor quality equipment and technology had been the root cause of worsening power situation in the state. Reacting to his allegations, the Congress leader and a former Haryana minister Krishan Murti Hooda blamed the previous INLD government for ordering to procure the Chinese equipments for the Yamunanagar power plant. "The decision to use the Chinese machinery was also taken during the tenure of Om Prakash Chautala in 2004 when the construction of this plant was underway. Now, his son Ajay Chautala is trying to mislead people of the state by terming the machinery cheap and a scrap", he stated. Hooda claimed that there was no problem in the technology and the machinery and it was absolutely fine and now the power generation had picked up. (http://articles.timesofindia.indiatimes.com/2012-07-07/chandigarh/32577528_1_power-plants-power-shortagepower-generation)

All of these quotes and statements of leaders or eminent people, confirm that Haryana is facing a severe power crisis. It seems that people have reached the stage of protesting it, so it has become necessary to the govt as well as researcher to analyse such situation and find factual position thereof.

OBJECTIVES OF THE STUDY

- To analyse the power situation in Haryana, taking the public view.
- To compare the power situation of two tenures of different governments in Haryana.
- To explore the level of discrimination (if any) in power supply between rural and urban.

RESEARCH METHODOLOGY

Research methodology is a set of procedures which deals specifically with the manner in which data is collected, analyzed, and interpreted. This study contains the following procedures:

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- 1. **Research Design:** Being study descriptive in nature, it will go through data collection from primary as well as secondary sources, its analysis with Variance Analysis and testing the validity of study using F-test.
- 2. Research Type: This is the Empirical study which is descriptive in nature.
- 3. Research Method: Being the population very large, sampling method has been chosen not census method.
- 4. **Source of Data:** Present study is mainly based on primary data that will be collected through circulation of well structured questionnaire to the selected people from selected districts of Haryana state. Furthermore data will also be collected through Newspapers, Magazines, Journals or Internet etc.
- 5. Sampling: It contains:
 - Number of Samples: 6

One from each of the 6 districts chosen at strata based sampling.

- Size: 200
- Type: Respondents have been selected randomly equally from rural and urban areas.

6. Analyzing tools & Techniques

- F-test
- One Way ANOVA Analysis

7. Study Period: This study proposes to consider 10 years (Two Tenures) data of different Governments.

DATA ANALYSIS

Five parameters as stated in table1 have been fixed to measure the people's attitude towards the power shortage faced by them. A questionnaire was structured and circulated containing questions seeking the knowledge of power situation in state of Haryana.

| S. | Variables | | % | of Responden | ts | |
|-----|--|-------------------|-------|--------------|----------|----------------------|
| No. | | | | | | |
| | | Strongly Agree | Agree | Indifferent | Disagree | Strongly Disagree |
| 1 | Power Supply: | | | | | |
| | Power supply is inadequate. | 36 | 54 | 1 | 5 | 4 |
| | Power is supplied in interruptive manner. | 33 | 56 | 2 | 3 | 6 |
| | Regional disparity exists in power supply. | 35 | 34 | 11 | 6 | 7 |
| | Generation of power is in excess of power supply to Haryana residents. | 10 | 17 | 23 | 27 | 23 |
| | State Govt. sells out the power to other states. | 13 | 17 | 21 | 31 | 18 |
| 2. | Demand of Power: | | | | | |
| 2. | Demand of power is more than supply. | 33 | 37 | 10 | 15 | 5 |
| | Demand is derived in nature. | 12 | 14 | 44 | 16 | 14 |
| | Substitute of power is not available. | 32 | 36 | 12 | 12 | 18 |
| | Government is unable to meet the demand. | 54 | 32 | 4 | 6 | 4 |
| 3 | Power Cut | | | | | |
| | There is a daily power cut. | 45 | 11 | 3 | 21 | 28 |
| | Power cut is for fixed period. | 23 | 27 | 7 | 31 | 12 |
| | There is discrimination in rural and urban power cut. | 34 | 33 | 3 | 24 | 6 |
| | Power cut is due to short availability of power. | 23 | 12 | 16 | 29 | 20 |
| 4. | Power Theft | | | | | |
| | Power theft rate is high. | 34 | 32 | 11 | 13 | 10 |
| | Power theft is found more in villages | 11 | 10 | 21 | 30 | 28 |

Table 1: Respondents' Attitude towards the Power Crisis in Haryana

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| | than urban. | | | | | |
|----|---|----|----|----|----|----|
| | Power is theft by the people of low | 18 | 12 | 11 | 30 | 29 |
| | income. | | | | | |
| 5. | Power Rate | | | | | |
| | Discrimination exits in power rate | 41 | 30 | 7 | 13 | 8 |
| | charged by government. | | | | | |
| | Power rate of rural areas is cheaper than | 35 | 39 | 2 | 12 | 12 |
| | urban. | | | | | |
| | Different rates are charged to purpose | 32 | 21 | 22 | 12 | 13 |
| | the electricity used for. | | | | | |

Table 1 shows that majority of the respondents takes that supply of power is shorter than demand. Most of respondents assume that power cut is there not for a fixed period of time. There is also a discrimination in power cut, supply rate and rate of charges of power between urban and rural areas. Results also confirm that power is theft at a high rate. Table 1 also indicates that power theft is not only done by rural and low income group people but also by urban and high income groups.

| Table 2: Power | Situation in Different Tenur | es of Different Govts |
|----------------|------------------------------|-----------------------|
| | T' D!. J | T' D!. J |

| Variables | Time Period 2005-10 | | Time Period 2000-05 | | F-Value |
|-----------------|-------------------------------|------|-------------------------------|------|----------------|
| | Mean | S.D. | Mean | S.D. | |
| Power Supply | 32.4 | 12.5 | 25.9 | 15.4 | 3.003 |
| Demand of Power | 33.9 | 14.8 | 28.0 | 8.6 | 3.341 |
| Power Cut | 35.8 | 10.7 | 28.4 | 10.5 | 4.876 |
| Power Theft | 30.0 | 11.2 | 21.0 | 12.5 | 4.327 |
| Power Rate | 9.56 | 3.61 | 6.87 | 2.13 | 1.56 |

As table2 indicates that power supply was increased in tenure of congress govt i.e. 2005-10 in comparison to last tenure of INLD i.e. 2000-05 but the demand of power has also been increased proportionately more in comparison to supply, that leaded the severe shortage of power in Haryana, consequently power cuts of longer duration were faced by public in later govt's ruling. As figure of power theft has been increased that indicates that because of inflation, increase in power rate, and increasing demand with short supply. Further all f-values excepting power rate, are significant at 5% level that validates the results and confirm that difference in various variables of power crisis between two time periods is significant.

| Variables | Rura | Rural Area | | Urban Area | | |
|-----------------|------|------------|------|------------|-------|--|
| | Mean | S.D. | Mean | S.D. | | |
| Power Supply | 12.4 | .25 | 15.9 | .54 | 4.038 | |
| Demand of Power | 10.9 | .48 | 18.0 | .86 | 3.781 | |
| Power Cut | 15.8 | .07 | 8.4 | .05 | 4.861 | |
| Power Theft | 10.0 | .12 | 2.0 | .25 | 4.537 | |
| Power Rate | 4.56 | .67 | 9.67 | .56 | 3.986 | |

Table 3: Rural and Urban Discrimination

All F-values shown in Table 3 are significant that means there is a lot of discrimination in demand, supply, power cut, power theft and power rate etc between rural and urban. As power is lesser supplied in rural areas, being of more demand in urban areas. Power cuts and power theft cases were found more in rural areas.

CONCLUSION

Haryana is a state of most being affected by power shortage in northern India in which regard different statements or reasons are being given by different political parties in a contrasted manner which led the researcher to make the study on this topic to know the reality from public point of view and consequently researcher finds that Harvana is facing a severe power shortage being the short supply to meet the increasing demand. As Govt is doing power cut and from public side power theft is going on. Now Public is fully aggrieved of this power problem and reached the stage of aggression that seems in movement kind resisting continuously. Further there is a lot of discrimination in rural- urban distribution of power in unjustified manner. Being their crops dependent on irrigating with power, agriculturists are adversely affected by such power shortage. India is a rural dominated country; it is not a good sign for national development so state as well as central govt should take some concrete steps to find the solution of this big problem.

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POLITICS STILL A GENDERED SPACE: BREAKING THE POLITICAL GLASS CEILING BY INTRODUCING WOMEN'S RESERVATION BILL IN PARLIAMENT

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ABSTRACT

Women represent almost fifty percent of the number of inhabitants in India. Participation of women in the electoral process of India as contestants has been exceptionally appalling since the inception of the electoral process of the nation. The marginalization of women in electoral politics is profoundly embedded in the party framework and the imbalanced gender power relations in the primary political agreements in India. They keep on being oppressed not just as far as seat allotments to contest elections but also within the rank and file of major political parties. To understand the constrained movement of women into prominent positions of authority, the idea of glass ceiling have come into wide use. The glass ceiling is a concept that refers to hindrances confronted by women who attempt, or wish to achieve senior most positions. The underrepresentation of women in the Lok Sabha indicates their exclusion from the political structure and the deeply embedded gender bias in the Indian society. To guarantee wide and extensive representation, India must enact the Women's Reservation Bill, a controversial piece of legislation which, if passed, will reserve one-third of parliamentary and state legislature seats for women candidates.

The present article will conceptualize glass ceiling practices and its related impact on the women's participation in Indian Politics. It will also distinguish the reasons why we have 'missing women' in Indian Parliament and discuss the case for and against the Women's Reservation Bill. This article will suggest the guidelines for government to ensure equal participation of women that will pave the way for correcting the present gender inequalities in Indian politics.

Keywords: Glass Ceiling, Missing Women, Women's Reservation Bill, Gender Inequalities.

INTRODUCTION

Political participation is comprehensively defined as being a procedure through which an individual assumes a role in political life of his society, has the chance to participate in deciding what the shared objectives of that society are and the most ideal way of accomplishing these objectives (Srivastava, 2000). Article 21 of the Universal Declaration of Human Rights has additionally recognized the right of each individual to contribute in the legislature of his or her own nation. Equal access of men and women to power and leadership at all levels is a fundamental precondition for the best possible functioning of a democratic nation.

In expressions of Abraham Lincoln, true democracy is a framework in which 'a government is of the people, by the people and for the people'. Yet it is debatable whether the government includes all the sections of our diverse society. In this scenario, the issue of low participation of women is of a special concern for democratic nations. Indian constitution gives provision for equal political participation of men and women in the process of formulation of democratic government. Disregarding the fact that the women represent half of the Indian population, the delegates of the women in the parliament are very few. Women in India have to a great extent been unsuccessful to attain the significant position in the parliament which is required to initiate gender orientation in political decision-making processes at elevated levels and to promote gender-friendly legislation (Muni, 1979). Women's participation in decision-making process is fundamental for women's interests to be integrated into governance. Accomplishing the objective of equal participation of women and men in leadership will give a balance that perfectly mirrors the composition of society and is required keeping in mind the main objective of strengthening democracy and promoting its proper functioning.

Women in India had their first attempt of breaking the glass ceiling well before the nation accomplished independence from the British Rule. In 1920, Sarojini Naidu and Margaret Cousin drove a gathering of women to demand equal rights of representation for the fair sex in the Indian Legislatures. By 1929 women were given the privilege to vote on the premise of wifehood, education and property. In 1931 the Indian National Congress adopted a resolution in favour of women's franchise and representation. After independence, India adopted a constitution in 1950 which ensured break even with political rights to both men and women. The first woman to be elected as Chief Minister (Uttar Pradesh) was Sucheta Kriplani in October 1963. India got her first women Prime Minister, Indira Gandhi, who served for three consecutive terms (1966–77) and a fourth term from 1980 until she was assassinated in 1984. The first, and so far only, woman President, was Pratibha Patil who was elected to the high office on 25 July 2007 (Pramar, 2016).

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The Constitution ensured right to vote to each woman of free India but representation of women in political parties or parliament stayed low even after achieving independence. The women who have been successful politicians are mostly from the families of Political leaders or through male political support. Regardless of that, very few women contest elections. Almost all political parties waver to field women candidates. Women candidates are perceived to be frail for advancing the interest of party at local, regional and national levels. Laws have likewise been enacted by the Central and State Governments to secure the rights of women. In the Lok Sabha, the percentage of women members has climbed from an insignificant 4.4 percent in 1952 to 11.26 percent in 2014.



Source: Election Commission of India, New Delhi.

But this does not demonstrate an amazing picture considering the fact that women make up almost fifty percent of the country's population. This premeditated segregation of women from political participation is objectionable and may be considered a breach of democratic rights. The marginalization of women and the imbalanced gender power relations are deeply entrenched in the Indian Politics. The women keep on being oppressed not just as far as seat allotments to contest elections is concerned but also within the rank and file of major political parties. Our social awareness and patriarchal political system do not allow a woman to make it to the top.

OBJECTIVES OF STUDY

The following objectives are formulated for the present study:

- 1. To make a comparison of India in terms of Women representation in Parliament with other nations.
- 2. To conceptualize glass ceiling practices in the politics and its related impact on the women's participation in Indian Politics.
- 3. To distinguish the reasons why we have 'missing women' in Indian Parliament.
- 4. To discuss the case for and against the Women's Reservation Bill.
- 5. To suggest the guidelines for government to ensure equal participation of women that will pave the way for correcting the present gender inequalities in Indian politics.

REPRESENTATION OF WOMEN IN LOK SABHA IN NUMERICAL TERMS

In India, to start with the first general election in 1952, the number of women representatives in both houses of Parliament has never gone past twofold figures; the current 62 in the Lok Sabha is the highest ever number of women becoming parliamentarians. In any case it is equally true this increase is statistically insignificant - while 2009 general elections saw 58 women enter the Lok Sabha, this time the number stands at 62. In fact the number of women who got tickets this time increased, however here again it was an insignificant rise. In 2009, there were 556 female contestants out of a total of 8,070; this time there were 668 women out of a total of 8,251 candidates. The above figures reflect the social standing of Indian women which in no way is at par with males. The participation of women as voters rise sharply, yet there has not been a commensurate expansion of women in Parliament. The lack of political voice and poor representation of women in Parliament is a result of exclusions on gender basis (Agarwal 2006).

As indicated in Table I women representation in Lok Sabha statistics shows that number of female participation in 1952 was 4.41%, step by step that rate increased to 11 % by 2014. The worldwide average of women in national parliaments rose from 22.6 per cent in 2015 to 23.3 in 2016 (Inter Parliamentary Union). These figures

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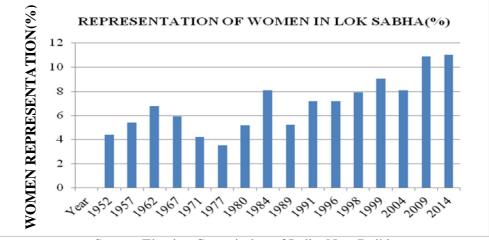
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indicate the need and importance thereof in Indian social setup to introduce Women's Reservations Bill in parliament in order to guarantee one-third reservation to women candidates.

| Year | Lok Sabha (Total Members) | Lok Sabha (Female Members) | % | | | |
|------|---------------------------|----------------------------|-------|--|--|--|
| 1952 | 499 | 22 | 4.41 | | | |
| 1957 | 500 | 27 | 5.4 | | | |
| 1962 | 503 | 34 | 6.76 | | | |
| 1967 | 523 | 31 | 5.93 | | | |
| 1971 | 521 | 22 | 4.22 | | | |
| 1977 | 544 | 19 | 3.49 | | | |
| 1980 | 544 | 28 | 5.15 | | | |
| 1984 | 544 | 44 | 8.09 | | | |
| 1989 | 517 | 27 | 5.22 | | | |
| 1991 | 544 | 39 | 7.17 | | | |
| 1996 | 543 | 39 | 7.18 | | | |
| 1998 | 543 | 43 | 7.92 | | | |
| 1999 | 543 | 49 | 9.02 | | | |
| 2004 | 543 | 44 | 8.1 | | | |
| 2009 | 543 | 59 | 10.86 | | | |
| 2014 | 543 | 62 | 11 | | | |

| Table I: Percentage Representation | of Women in Lok Sabha |
|------------------------------------|-----------------------|
|------------------------------------|-----------------------|

Source: Election Commission of India, New Delhi.



Source: Election Commission of India, New Delhi

WOMEN REPRESENTATION IN PARLIAMENT: GLOBAL SCENARIO

Rao (2016) in their review revealed that of the 8 SAARC nations, India stands at fifth position and out of five BRICS nations it stands fourth. Also it stands at 103rd place out of 141 ranks given by Inter Parliamentary Union and 13th position out of 18 Asian countries.

WOMEN REPRESENTATION IN INDIA (GLOBAL SCALE)

```
0% INDIA (11.8%)
```

RWANDA (61.3%) 100%

Table II: Women Representation In Parliament

| WORLD CLASSIFICATION | | | | | | |
|----------------------|---------|------------------------|-----|-----|-------|--|
| Rank | Country | Lower or single House | | | | |
| Kalik | Country | Elections Seats* Women | | | | |
| 1 | Rwanda | 16.09.2013 | 80 | 49 | 61.3% | |
| 2 | Bolivia | 12.10.2014 | 130 | 69 | 53.1% | |
| 3 | Cuba | 03.02.2013 | 612 | 299 | 48.9% | |
| 4 | Iceland | 29.10.2016 | 63 | 30 | 47.6% | |

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| 5 | Nicaragua | 06.11.2016 | 92 | 42 | 45.7% |
|-----|------------|------------|-----|----|-------|
| 148 | India | 07.04.2014 | 542 | 64 | 11.8% |
| 189 | Oman | 25.10.2015 | 85 | 1 | 1.2% |
| 190 | Micronesia | 03.03.2015 | 14 | 0 | 0.0% |
| 190 | Qatar | 01.07.2013 | 35 | 0 | 0.0% |
| 190 | Vanuatu | 22.01.2016 | 52 | 0 | 0.0% |
| 190 | Yemen | 27.04.2003 | 275 | 0 | 0.0% |

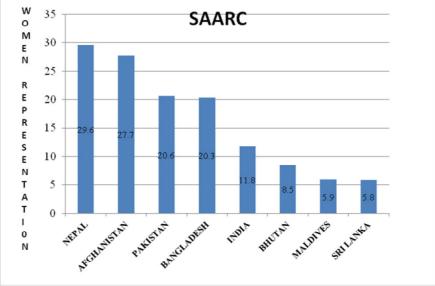
Source: Inter Parliamentary Union (2016)

The data in the Table II above has been compiled by the Inter-Parliamentary Union on the basis of information provided by National Parliaments by 1st January 2017. 193 countries are classified by descending order of the percentage of women in the lower or single House. This table depicts the top five and bottom five countries on the basis of women representation in Parliament, though India stands at 148th position.

| SAARC NATIONS CLASSIFICATION | | | | | | |
|------------------------------|-------------|-----------------------|--------|-------|-------|--|
| | | Lower or single House | | | | |
| Rank | Country | Elections | Seats* | Women | % W | |
| 48 | Nepal | 19.11.2013 | 595 | 176 | 29.6% | |
| 54 | Afghanistan | 18.09.2010 | 249 | 69 | 27.7% | |
| 89 | Pakistan | 11.05.2013 | 340 | 70 | 20.6% | |
| 91 | Bangladesh | 05.01.2014 | 350 | 71 | 20.3% | |
| 148 | India | 07.04.2014 | 542 | 64 | 11.8% | |
| 169 | Bhutan | 13.07.2013 | 47 | 4 | 8.5% | |
| 177 | Maldives | 22.03.2014 | 85 | 5 | 5.9% | |
| 179 | Sri Lanka | 17.08.2015 | 225 | 13 | 5.8% | |

Table III: Women Representation In Parliament

Source: Inter Parliamentary Union (2016)



Source: Inter Parliamentary Union (2016)

The data in the Table III above has been compiled by the Inter-Parliamentary Union on the basis of information provided by National Parliaments by 1st January 2017. India stands at fifth position among the SAARC Nations.

| Table IV: Women Representation In Parliament | | | | | | | |
|--|----------------------|------------|--------|-------|-------|--|--|
| | BRICS CLASSIFICATION | | | | | | |
| Lower or single House | | | | | | | |
| Rank | Country | Elections | Seats* | Women | % W | | |
| 9 | South Africa | 07.05.2014 | 398 | 167 | 42.0% | | |
| 74 | China | 05.03.2013 | 2949 | 699 | 23.7% | | |
| 128 | Russian | 18.09.2016 | 450 | 71 | 15.8% | | |
| 148 | India | 07.04.2014 | 542 | 64 | 11.8% | | |
| 154 | Brazil | 05.10.2014 | 513 | 55 | 10.7% | | |

Source: Inter Parliamentary Union (2016)



Source: Inter Parliamentary Union (2016)

The data in the Table IV above has been compiled by the Inter-Parliamentary Union on the basis of information provided by National Parliaments by 1st January 2017.BRICS, the emerging power pack of Brazil, Russia, India, China, and South Africa is depicted in the above chart. India stands fourth amongst these countries, with only Brazil at the bottom with only 9% women.

From the analysis of the above tables and charts we can say that women are far behind the 33 percent, which is considered as the critical mass for women to exert a substantial influence on politics.

GLASS CEILING IN POLITICS

To understand the limited movement of women into prominent positions of authority, the idea of glass ceiling have come into wide use. The glass ceiling is an idea that refers to hindrances confronted by women who attempt, or wish to achieve senior most positions at workplace. Female employees encounter stumbling block in their career and frequently find a taboo that paves their way to growth and development.

The glass ceiling as a concept initially appeared in 1986 in a Wall Street Journal entitled 'The Glass Ceiling: Why Women Can't Break the Invisible Barrier that Blocks them from Top Jobs' (Hymowitz & Schellhardt, 1986). Glass Ceiling implies presence of barriers that blocks the upward mobility of women: Below this blockade, women do get rise and beyond this there is no growth and development.

Crampton and Mishra (1999) expressed that the "glass ceiling" is the unpretentious barrier of negative attitudes and preferences that prevents women from moving beyond a certain level in the corporate hierarchy. They uncovered that the glass ceiling effect can result through corporate discrimination and family-career roles.

Baxter and Wright (2000) stated that the glass ceiling hypothesis expresses that not only is it more difficult for women than for men to be promoted up levels of authority hierarchies within workplaces but also that the obstacles women face relative to men become greater as they climb the corporate hierarchy.

Parveen Rai (2011) had contended that despite the Indian Constitution granting women equal right to participate in Parliament, "the existing patriarchal value system, the private-public divide in terms of domain identification and male predominance in political institutions restrict women from exercising their right to vote and a fair participation in electoral competition."

"The principles of gender-sensitive parliaments can be advanced if women occupy leadership positions as parliamentarians and as key members of parliamentary staff, as they are in a position to influence policy directions, change parliamentary procedure and practices, serve as role models to other women and provide a different perspective in debates" - Plan of Action for Gender-sensitive Parliaments, IPU, 2013.

WOMEN MAKE PROGRESS IN POLITICS, BUT GLASS CEILING REMAINS UNBREAKABLE

Women head a considerable number of national and state-level political parties yet the overall representation of women within the rank and file of these parties is bleak. Some women have shattered the glass ceiling in politics but their contributions are still sidelined. The under-representation of women in the Lok Sabha, and from crucial leadership positions such as in the Cabinet demonstrates their systematic exclusion from the political structure and the profoundly embedded gender basis in Indian society.

Pyramidal Political Participation of Women

The political participation of women in quantitative terms can be analysed through a hierarchical structure including four levels which are as follows:

- 1. Lower House of Parliament: In the top stratum is female representation in the lower house of Parliament and in legislative assemblies which is the narrowest and most rigid numerically.
- 2. **Members of Political Parties:** In the second stratum are women as candidates in electoral competition participating as members of political parties where their representation in quantitative terms is more than that at the top layer.
- 3. **Campaigners:** Women in the third stratum are the active campaigners for political parties where their participation is much larger in numbers than that in the second stratum.
- 4. Voters: The bottom strata with the widest base of women in numerical terms are that of single-time voters.

The levels of female representation at the top levels of this pyramid are comparatively low as compared to Indian men and the only levels of electoral participation where women have achieved some degree of parity are as voters in elections. Indian electoral politics reveals exclusionary trends in providing space to women to participate as candidates in national and state level elections that stem from their marginalisation within the party hierarchy which is patriarchal in nature.

Women who have made their presence felt in inner party structures are also relegated to the second rung leadership and have failed to break the "glass ceiling". Putting a crack in the glass ceiling does not necessarily guarantee equal political rights for women. This is often the case in parliaments where women are given 'women's only' portfolios because of their gender. The absence of a significant mass of women representatives reduces their negotiating power during the allotment of key cabinet berths in India. They are mostly allotted ministries which are termed as "feminine" ministries like textile; women and children welfare or information and culture. These industries are perceived as relatively less important. The "heavy-weight" ministries such as finance, home, defence or health are generally allotted to men and considered as key to development of a nation.

To this degree, women in India appear to have failed in breaking the glass ceiling and have been consigned to the periphery in power sharing at the top level, which, thus, has an adverse impact on their overall political status in the country and has acted as barriers in higher electoral participation.

BARRIERS TO WOMEN ADVANCEMENT IN POLITICS

One of the major reasons behind the wide gap between female and male representatives in Parliament is the patriarchal mindset i.e. "men at work, women at home" that we still carry today. This male dominance act as an obstacle which deliberately excludes women from sharing power as equals with men. Some researchers contradict that due to the determination of women's movements in different parts of the country and government-regulated quotas, women's presence in the political arena is increasing, particularly in voting patterns, decision-making power and women's access to positions in public office (Banerjee, 2003; Vyasulu & Vyasulu, 1999). It is accepted that educated employed women, women of a higher social standing and urban women are more likely to be interested as well as more active in politics (Chhibber 2002). There are several causes for the fewer candidature of women in parliament which are as follows:

(a) **Socio-Historic Forces:** The socio-historic forces inherited from nationalist movements and the gendered nature of citizenship in hampering women's political participation in elections is the main reason which results in 'missing women' in the Parliament (Vissandjée et al., 2006).

- (b) **Reservation:** There is a lack of reservation of seats for women which reduces their candidature in the parliament.
- (c) **Political Parties:** There is the lack of national consensus and willingness among political parties to give more tickets to women in elections.
- (d) **Patriarchal Structure of Indian Society:** Perpetuation of a patriarchal political structure together with gender subordination acts as a strong deterrent to women contesting elections. People have gendered perception of politics in their minds.
- (e) Lack of Family Support: There is a lack of financial support from the family and political parties which severely affects women's chances to contest and win elections (Rai, 2011).
- (f) **Win ability Aspect:** Many political parties assume women as 'less winnable' candidates, therefore fewer tickets are allotted to them. (Basu, 1992)
- (g) **Demographic Factors:** Individual socio-demographics including education and income, socio-cultural norms, caste and their levels of liberty are also associated with women's opportunities in political participation.
- (h) **Social Networking:** Social networking and regional factors also determine their levels of participation in election campaigns.
- (i) **Lack of Support for Women:** Even the best women Ministers feel powerless within their respective political parties. They don't get support by political parties so that the few women leaders remain an ineffective minority unable to facilitate the entry of greater numbers of women in politics (Kishwar, 1996).
- (j) Violence: A recent study, 'Violence against Women in Politics', conducted in the three South Asian countries of India, Nepal and Pakistan (brought out by the Delhi-based Centre for Social Research and UN Women) revealed that more than 60 per cent of women do not participate in politics due to the fear of violence. According to the study, which analysed incidents of violence against women in politics that occurred between 2003 and 2013, an estimated 45 per cent of women candidates in India faced physical violence. Many women also reported that they were actively prevented, not just from joining a political party or contesting elections, but from something as basic as voting.

WOMEN RESERVATION BILL: DO WE NEED A QUOTA FOR WOMEN?

To ensure wide and far-reaching representation, India must enact the Women's Reservation Bill, a contentious piece of legislation which, if passed, will reserve one-third seats in parliament and state legislature for women candidates. This bill was first introduced in September 1996. It's been re-introduced many more times, but has never been passed due to staunch opposition by some parties. A 'consensus bill' like the Women's Reservation Bill has received broad based support from all political parties, yet the same parties have hindered the passage of this Bill in session after session of Parliament. They demand a quota to be fixed for the women belonging to backward sections of the society within the 33 percent of women reservation otherwise the benefit of this reservation is likely to be cornered by the women belonging to upper and well-off sections of our society. Other political parties contend that if 33 per cent reservation for women is added to the already existing 22.5 per cent for scheduled castes and tribes, then more than 55 percent of seats in Parliament would be reserved. This would not be fair to other sections of the society.

Men and women should get a free and proportionate chance to enjoy and exercise their political rights and participate in electoral competition. The inclusion of women in the political structure will correct the existing gender gaps in the electoral arena and also bring gender issues to the forefront leading to women's empowerment in the society. The Inter-Parliamentary Union says ninety countries have some kind of quota for women. That's almost half the countries of the world. Appropriate representation of women is possible only through a quota regime, and this in turn will bring more transparency and efficiency in functioning of parliament. Though the reservation would have positive effects of women's reservation policies on local governance, it may also have some negative impact on our democratic nation which is as follows:

ARGUMENTS AGAINST RESERVATION BILL

1. Women elected as proxy: Reservations for women are ineffective because while it will empower those women who make it to parliament, it will not do much for the majority of women who don't. Stuffing parliament with women elected as proxies for their male relatives will defeat the spirit and the purpose of the reservation. It will also create men who can enjoy all the privileges of political power without being accountable to anyone.

- 2. Erosion of the rights of protected minorities: A quota for women in parliament would erode the rights of protected minorities including Dalits, who already have reservations in parliament.
- 3. No objective criteria: There is hardly any measure to make sure that the benefits of reservation are received by the socially backward and underprivileged women. There is no objective criterion to prevent the elite class or "creamy layer" of women from taking undue and unfair advantage of this legislation. It would give women an unfair advantage and could possibly field poorly qualified female candidates just to fill a required number.
- 4. Wrong impression to women's capability: The concept of reservation is an insult to women and their capability. It gives the impression that women are incapable of competing with men and hence need protection and a support structure to enter public offices of parliament and state legislatures.
- 5. **Misuse of gender stereotyped assumption:** The current Bill is build on gender stereotyped assumption that forcing more women on the electorate will improve women empowerment. Forcing more women in the parliament through undemocratic means will only serve to undermine the legitimacy and efficacy of the elected women representatives. Thus, the socially backward women would continue to be oppressed while the creamy layer among women would easily get entry into electoral politics. Political parties may have to locate women candidates irrespective of the candidate's vision mismatch with that of the party's vision.

To conclude, treating women as a blanket category for the advantages of reservation would additionally obscure the issue of women's representation and participation in India's electoral competition. The benefits of reservation would largely be appropriated by the women belonging to the upper echelon of society or to those already having a political background. Thus, women from the lower economic stratum, backward castes and marginalised groups would get further excluded from contesting elections and sharing political power.

RECOMMENDATIONS

The goal of Reservation Bill must not merely be to increase the number of women representatives as the proxies of male politicians, but to improve the women's representation overall. Thus in order to be meaningful, a 3D Approach represented by the political determination of the people, their general political awareness and the constitutional and legislative measures has to be developed. These policy suggestions focus on providing thrust for electoral empowerment of women in India focusing on the symbolic obstacle of the Women's Reservation Bill (Mukherjee, 1997; Shah & Gandhi, 1991). Following are some of the recommendations to improve the candidature of women in Indian politics:

- 1. The Parliament and the government at all levels need to assume affirmative action measures so as to give preference to women over men for leadership positions in cases where qualifications commensurate with their representation in the government.
- 2. Women should fight for their due share instead of waiting for political empowerment and showcase their incomparability at the time of voting.
- 3. Political parties too could give more tickets to women candidates instead of disagreeing against their capacity to win. Parties should be compelled to give at least one-third of their tickets to women by making the necessary amendments in the 'Representation of the People Act' in India.
- 4. Women politicians should try to promote the empowerment of women. An increased political participation by women would serve the larger women issues i.e. upliftment of Indian women.
- 5. The government can set aside a percentage of party funds for women campaigning in the elections, to enable more women to participate in the political process.

CONCLUSION

Women play a vital role in making a nation progressive and guide it towards development. Women's participation in parliament is essential for women's interests to be incorporated into governance. Gender mainstreaming efforts in the political sphere have focused on increasing the numerical presence of women in relevant institutions while overlooking the need to guarantee effective participation in strategic decision making processes. Women elected on the basis of affirmative action policies only satisfy a symbolic purpose rather than effectively contribute to the advancement of women's rights.

To conclude, the political representation of women remains low in Parliament despite the shrinking gender gap in their participation as voters. The highest elected body in India remains male dominated both in opinion and person. The high gender gap in representation for the Lok Sabha reflects the degree of political democracy which affects the women's chances of winning seats in elections. The intensity of democracy should be positively related to women's political representation since democratic process shrinks the gender barrier. The opportunities to women might also construct democratic decision making, improve the level of competition for better governance and contribute to the diversity of experiences and views in Lok Sabha. Introduction of Women's Reservation Bill can be considered as a giant-leap in the history of Indian parliament which will ensure greater participation of women in the Parliament and will ensure better chances of women empowerment across the country.

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STUDY OF INVESTORS PERCEPTION TOWARDS CORPORATE REPORTING PRATICES

Pradep Asthana and Syed Afzal Ahmad

ABSTRACT

This paper reports on voluntary financial disclosure practices of Indian companies and relates the extent of disclosure to firm size, financial leverage, and proportion of assets in place. Studying the voluntary disclosure of Indian firms yields additional insights into voluntary disclosure parameters, and enhances our understanding of the financial reporting and practices adopted by Indian companies. Voluntary disclosure varies widely within the existing companies and their information perceived by investors for their investment objectives. The extent of disclosure varies significantly among sectors and is positively related to firm size, brand, goodwill and past performances.

Keywords: Disclosure, Financial reporting, Investment, financial leverage.

INTRODUCTION

Corporate reporting may be defined as communication as published statement and related information from a business enterprise to all users. It is a process to identify, measure and communicate economic information to permit informed judgments and decisions by the user of the information. Its function is to provide quantitative information, primarily financial in name, about economic entities, that is intended to be useful in making economic decisions and related choice among alternative course of action. Financial reporting may be defined as communication of published financial statement and related information from a business enterprise to all users. It is the reporting of accounting information of an entity to a user or group of users. It contains booth qualitative and quantitative information.

With the rapid change in the economic and industrial scenario, the role of accounting has also been changed over a period of time. Accounting Activity is no longer confined to the historical description of financial activities rather it is now being regarded as service activity i.e. providing information to various user groups. The user groups are management, employee, investors, trade unions, tax authorities, creditors, competitors, public etc. The Financial report made to the insider group is generally known as internal reporting, while made to the outsider groups is known as eternal reporting. The internal reporting is a part of management information system and the management makes every effort to make use of such information. However, the external reporting seems to be more crucial as the management is the supplier of information to various user groups outside the management and a gap is always found. Between the need and supply, Professionals within an organization perform accounting function. But the ultimate responsibility for the generation of accounting information rest with the management. The accountability of a company has two distinct aspects – legal and social. Under legal requirements a company has to supply certain information to the various users through annual reports and under the social obligation, a company has to provide additional information to various user groups. It is also suppressing to note that, many useful such information, are non- – mandatory in India and non - disclosure of such information is detrimental to the interest of investors and equity analysts. This may be considered one of the cause contribution lower market value of shares despite a higher book value. Therefore, a greater transparency in corporate financial reporting is desired.

Corporate disclosure with its determinant analysis has become a thrust area of research for various researchers and academicians. Many researchers have contributed towards exploration of this area of research. Still, many questions arise in the mind of an analyst or researcher as to why do different firms in the same industry have varying disclosure practices?. The need is to explore the area why the extent of information is differing among industries or in the same industry? Day by day the concept of disclosure is also changing. Now, it does not mean disclosing immaterial, irrelevant and vague information. Now, emphasis is laid on the qualitative aspect of information which is relevant to informed investors for making economic decisions. The main reason for this emphasis is that full and completed disclosure is the cornerstone to protect the shareholder's rights. Shareholders are the owners of a company and they should be informed about the working prospects of a company. Only through full and complete disclosure can shareholders feel confident that the firm in which they have invested their hard earned money is being operated with their best interests in mind. Forward-thinking companies report both financial and regulatory (operational) data to key external and internal constituents. They monitor market and stakeholder reactions to the reported information and then adapt their disclosure in response to such feedback as well as other market, regulatory and social developments. In return for such transparent and proactive reporting, the companies enjoy benefits such as stronger stakeholder relationships, greater support throughout all operations for reporting initiatives, larger following of investment analysts, easier access to capital and lower reputation risk"[1].

Corporate disclosure is critical for the functioning of an efficient capital market. Firms provide disclosure through regulated financial reports, including the financial statements, footnotes, management discussion and analysis, and other regulatory filings. In addition, some firms engage in voluntary communication, such as management forecasts, analysts' presentations and conference calls, press releases, internet sites, and other corporate reports. Finally, there are disclosures about firms by information intermediaries, such as financial analysts, industry experts, and the financial press. We believe that financial reporting and disclosure will continue to be a rich field of empirical enquiry. Further, There are significant changes in the economic environment, rapid technological innovation, the emergence of network organizations, changes in the business economics of audit firms and financial analysts, and the globalization of capital markets. These changes have the potential to alter the nature of financial reporting and disclosure, creating rich new opportunities for research"

LITERATURE REVIEW

Measurement of accounting information quality is complex and difficult. In the past proxy measures have included relevance, conservatism, and objectivity (versus earnings management). However, accounting information quality can be also measured indirectly by

investigating the motives and incentives of accounting information preparers. The demand for accounting information comes from various sources including managers, investors, lenders, employees, suppliers, customers, governments and the public (Alexander & Nobes, 2004).

In addition countries' legal traditions and capital markets structure can be expected to affect the availability and quality of accounting information (Ball, Robin & Wu, 2003; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000).

Accounting information is of highest quality when it supports decision making of the highest quality. Optimal decision support thus is a purpose of accounting information that corresponds to decision usefulness. If a company's CEO considers tax compliance as the main purpose for preparing accounting information, s/he might be expected to invest less in a quality information system than when the quality of her/his decisions depended on that information system. Previous research suggests that in countries where tax compliance dominates and financial accounting practices are aligned with tax practices for purposes of keeping costs low, accounting information is less value relevant (Ali & Hwang, 2000). High conformity between financial and tax accounting compromises the value relevance of financial accounting information, as tax accounting is not designed to meet either managers or investors' needs (Young & Guenther, 2003).

Opacity of financial reporting, particularly earnings opacity, is important in two respects: reliability of financial information, and impact on economy. A high opacity index for a country indicates companies in that country have poor corporate governance, and poor governance leads to corporate failure. Prior studies have also shown a positive association between the level of corporate governance and the credibility of financial reporting systems (Farber, 2005). It, therefore, can be inferred that financial information from high opacity country firms is less reliable. Prior studies have also shown that an increase in earnings opacity leads to an increase in cost of capital, exactly the opposite of what market liberalization intends to do (Bhattacharya, Daouk, & Welker, 2003).

There has been significant diversity of financial reporting by countries in the world (Saudagaran & Diga, 1997). Prior studies have shown that diversity in accounting standards affects financial analysts' predictions (Ashbaugh & Pincus, 2001). The comparability and comprehension of financial reports from different countries, therefore, is a significant problem. Two recent events, however, have accelerated the harmonization of financial reporting standards. The first is that in 2002 the European Union (EU) approved a regulation requiring all companies listed in its regulated markets to follow the International Financial Reporting Standards (IFRS) starting in 2005. The second is that in 2007 the US Securities and Exchange Commission (SEC) eliminated the requirement for listed foreign companies that adopt IFRS to reconcile IFRS to US Generally Accepted Accounting Principles (GAAP) in Form 20-F. Currently, more than 90 countries in the world are requiring or converging toward IFRS (Ball,2006; Fajardo, 2007).

The adoption of the International Financial Reporting Standards (IFRS) by public firms around the world is one of the most significant financial accounting and reporting changes in accounting history. Currently, over 100 countries have implemented IFRS or at least have taken steps in adopting these standards in the future (Sacho &

Oberholster, 2008). In Europe, every publicly traded company in the European Union (EU) member state is required to apply IFRS when preparing the consolidated financial statements (IASPlus (a). (n.d.). In the U.S., the Securities and Exchange Commission (SEC) has allowed non-US firms to file financial statements in accordance with IFRS of the IASB without reconciliation (SEC, 2007). In Asia, countries with substantial economies, such as Japan, India and China, are either in the process of transitioning to IFRS or have already converged to IFRS (PwC, 2008). In addition, most listed companies worldwide are directly or indirectly affected by IFRS issued by the nternational Accounting Standard Board (IASB). Accounting standards setting is shaped by both economical and political considerations (Ball, 2006). On the one hand, the IASB has to consider the interests of different parties including multinational corporations, audit firms, investment banks, international organizations, and various public authorities in Europe, China, the U.S. and elsewhere (Véron, 2007a). On the other hand, countries that are notably affected by the IASB standards have a stronger interest in the IASB's work and are seeking to influence it.

INFLUENCE OF PRO FORMA EARNINGS DISCLOSURES ON INVESTOR JUDGMENTS

Influence of pro forma earnings disclosures on investor judgments Pro forma earnings are a function ofmanagement discretion and are not uniformly defined; thus, the Securities and Exchange Commission (SEC) is concerned about the potential for proforma in formation to mislead investors (SEC, 2001). While the SEC acknowledges that pro forma information can serve useful purposes, they question whether the use of pro forma metrics confuses investors and makes comparisons between reporting periods and between companies difficult. Sharing this concern, Congress directed the SEC in Section 401 of the Sarbanes–Oxley Act (U.S. House of Representatives, 2002) to develop regulations to reduce or eliminate pro forma earnings disclosures which might be misleading (Entwistle, Feltham, & Mbagwu, 2006). The SEC responded by issuing Regulation G (SEC, 2003), which requires the reconciliation of pro forma information to the corresponding GAAP measures. Frederickson and Miller (2004) suggest that the presence of pro forma disclosures influences nonprofessional investors' judgments through unintentional cognitive effects. Subsequent experimental (Elliott, 2006) and archival (Allee, Bhattacharya, Black, & Christensen, 2007; Zhang & Zheng, 2011) research indicates that reconciling pro forma earnings disclosures to GAAP reduces the influence of pro forma emphasis earnings disclosures on nonprofessional investors' judgments. These studies, however, do not consider the fact that differences in financial reporting knowledge among nonprofessional investors are significant, which may affect how they acquire and integrate financial information, and, in turn, may influence their resulting judgments (Elliott et al., 2007, 2008). Frederickson and Miller (2004) find that nonprofessional investors who reviewed earnings press releases which report unreconciled pro forma figures that are greater than GAAP earnings assessed a higher future stock price than did thosewho examined a press release containing GAAP-only disclosures. At the same time, the presence of unreconciled pro forma earnings disclosures did not affect the stock price judgments of professional investors. Supplemental analyses suggest that pro forma earnings disclosures influence nonprofessionals' judgments because of unintentional cognitive effects, rather than nonprofessionals perceiving the supplemental disclosures as informative.

Professional investors' judgments are not affected by pro forma earnings disclosures because they appear to use well-defined valuation models that reflect an understanding of the relative importance of various pieces of financial information. Similarly, Elliott (2006) finds that the earnings performance judgments of nonprofessional investors are higher when they are given a press release which emphasizes unreconciled pro forma earnings disclosures relative to the judgments of nonprofessional investors given GAAP-only disclosures. Professional investors' earnings performance and investment judgments, however, do not appear to be significantly different whether they view unreconciled pro forma emphasis or GAAP-only earnings disclosures. Further, Elliott finds that earnings performance and investment judgments of nonprofessional investors provided with a press release that emphasizes pro forma earnings and reconciles this measure to GAAP do not differ from those of nonprofessional investors given GAAP-only disclosures. This effect appears to occur because the reconciliation repackages information on differences between GAAP and pro forma earnings in a format that makes it easier for nonprofessional investors to acquire and incorporate into their judgments. Interestingly, earnings performance and investment judgments of professional investors provided with a pro forma earnings press release reconciled to GAAP are higher than judgments of those provided with GAAP-only disclosures or unreconciled pro forma earnings disclosures. This apparently occurs because professional investors have higher confidence in reconciled, as opposed to un-reconciled, pro forma disclosures.

OBJECTIVES OF THE RESEARCH

To identify whether the corporate reporting practices influence the investors perception in decision making or not.

To identify the level up to which corporate reporting influences the investors decision making and whether they are sufficient or not.

RESEARCH METHODOLOGY

A Comprehensive survey that asks experienced, nonprofessional investors to describe their perceptions about corporate reporting practices adopted by Indian corporate houses The study was done on 500 independent individual investors inclusive. Majority of the individual investors are the general public, who face typical problems in times of adverse conditions without having any tact. A questionnaire is administered to the sample investors in Lucknow and nearby areas . An interrogative questionnaire is designed for the study , and Cronbach Alpha is implied for the authenticity of the questionnaire, a set of defined parameters is established with the help of literature review and based upon those 47 parameters are identifies which are being analysed by factor analysis's and Principal component analysis through KMO barters test.

The study covers only the individual investor. Their perceptions on the disclosure practices in terms of a few parameters like: Disclosure of Risk Exposure, Disclosure of Additional Information in Financial Statements, Disclosure of information in Director's report, and Disclosure of information required for quoting a price tag in Book Building process. Investment depends upon various factors like risk, return, capital appreciation, taxbenefits and speculation. Investors may be classified as risk taker, risk neutral, and risk averter. Depending upon his risk perception, he makes an investment decision. Risk averter is one who avoids risk, therefore prefers to invest in regular income earning securities. On the other hand, a risk taker is one who is willing to take risk and invest in capital appreciation securities. A risk neutral is in-between.

DATA ANALYSIS AND INTERPRETATION

In our measurement design, we have modified and combined the items of some scales (i.e. information averseness in general and impact of information on investment decision). Hence, we employed exploratory factor analysis in order to see to which extent these items would accumulate on the same factors. Firstly, KMO value shows that our study sample is adequate for factor analysis. Principal component analysis has extracted eight factors. Based on the varimax rotation method, the factor loadings of items and Cronbach's alpha values of factors in the final analysis can be seen. Meanwhile, financial literacy scale is not subject to factor analysis as an observed variable which is calculated through the true answers of participants.

| Case Processing Summary | | | | | |
|-------------------------|-----------------------|-----|-------|--|--|
| | - | Ν | % | | |
| Cases | Valid | 500 | 100.0 | | |
| | Excluded ^a | 0 | .0 | | |
| | Total | 500 | 100.0 | | |

| Case | Processing | Summary |
|------|------------|---------|
| | | |

•

a. Listwise deletion based on all variables in the procedure.

| Summary Item Statistics |
|-------------------------|
|-------------------------|

| - | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
|----------------------------|-------|---------|---------|-------|-------------------|----------|------------|
| Item Means | 3.324 | 1.350 | 4.482 | 3.132 | 3.320 | .461 | 58 |
| Item Variances | .860 | .233 | 2.358 | 2.125 | 10.141 | .122 | 58 |
| Inter-Item Covariances | .049 | 519 | .720 | 1.239 | -1.386 | .014 | 58 |
| Inter-Item Correlations | .057 | 505 | .794 | 1.299 | -1.571 | .019 | 58 |

Scale Statistics

| Mean | Variance | Std. Deviation | N of Items |
|--------|----------|----------------|------------|
| 192.77 | 211.421 | 14.540 | 58 |

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| KMO ar | nd Bartlett's Test | |
|-------------------------------|-------------------------|---------|
| Kaiser-Meyer-Olkin Measur | e of Sampling Adequacy. | .665 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2.785E3 |
| | df | 325 |
| | Sig. | .000 |

Total Variance Explained

| | Ini | itial Eigenva | lues | Extract | tion Sums o Loading | of Squared s | Rota | ation Sums o Loading | |
|---------------|-------|------------------|------------------|---------|------------------------|------------------|-------|-------------------------|--------------|
| Comp onent | Total | % of Variance | Cumulati ve % | Total | % of Variance | Cumulativ e % | Total | % of Variance | Cumulative % |
| 1 | 3.442 | 13.239 | 13.239 | 3.442 | 13.239 | 13.239 | 2.261 | 8.696 | 8.696 |
| 2 | 2.543 | 9.782 | 23.022 | 2.543 | 9.782 | 23.022 | 2.249 | 8.652 | 17.347 |
| 3 | 2.129 | 8.189 | 31.211 | 2.129 | 8.189 | 31.211 | 2.197 | 8.449 | 25.796 |
| 4 | 1.749 | 6.728 | 37.939 | 1.749 | 6.728 | 37.939 | 1.977 | 7.604 | 33.400 |
| 5 | 1.677 | 6.451 | 44.390 | 1.677 | 6.451 | 44.390 | 1.893 | 7.280 | 40.680 |
| 6 | 1.325 | 5.096 | 49.486 | 1.325 | 5.096 | 49.486 | 1.579 | 6.074 | 46.754 |
| 7 | 1.178 | 4.529 | 54.015 | 1.178 | 4.529 | 54.015 | 1.560 | 5.999 | 52.753 |
| 8 | 1.044 | 4.015 | 58.030 | 1.044 | 4.015 | 58.030 | 1.372 | 5.277 | 58.030 |
| 9 | .993 | 3.820 | 61.849 | | | | | | |
| 10 | .939 | 3.612 | 65.462 | | | | | | |
| 11 | .852 | 3.276 | 68.738 | | | | | | |
| 12 | .825 | 3.173 | 71.911 | | | | | | |
| 13 | .796 | 3.061 | 74.972 | | | | | | |
| 14 | .729 | 2.803 | 77.775 | | | | | | |
| 15 | .654 | 2.514 | 80.289 | | | | | | |
| 16 | .644 | 2.478 | 82.767 | | | | | | |
| 17 | .611 | 2.350 | 85.117 | | | | | | |
| 18 | .588 | 2.263 | 87.379 | | | | | | |
| 19 | .532 | 2.045 | 89.424 | | | | | | |
| 20 | .500 | 1.924 | 91.348 | | | | | | |
| 21 | .483 | 1.858 | 93.206 | | | | | | |
| 22 | .436 | 1.679 | 94.885 | | | | | | |
| 23 | .400 | 1.540 | 96.425 | | | | | | |
| 24 | .347 | 1.335 | 97.759 | | | | | | |
| 25 | .305 | 1.175 | 98.934 | | | | | | |
| 26 | .277 | 1.066 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

| Component Matrix ^a | | | | | | | | | | |
|---|-----------|------|---|---|---|-----|---|---|--|--|
| | Component | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| Investor consults research reports in Newspaper | | .453 | | | | | | | | |
| Investor consult Microeconomic Analysis | | | | | | | | | | |
| Investor consults Technical and Statistical Analysis | | | | | | 569 | | | | |
| Investor consult research reports on stock market related Websites? | | .406 | | | | | | | | |

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| News stories in the media have an impact on your investment decision? | | .481 | | | | | |
|---|--------|------|------|------|------|------|------|
| Investment decision of the company have an impact on in decision making for the your stock? (e.g- company purchases stock of another company) | | .574 | | | | .417 | |
| Accounting information has an impact on investment decisions | | .564 | | | | | |
| Rate of return on Investment have an impact on investment decision? | | .561 | 484 | | | | |
| Information related to risk has an impact on investment decision | | .569 | 442 | | | | |
| Market regulations has an impact on investment decision. | | .547 | 435 | | | | |
| Business partners / Customers / Suppliers/ Competitors have an impact on investment decision | | | | | | | |
| Nature of competition in the Industry have an impact on investment decision | .452 | | | | | | |
| Size of the company have an impact on investment decision | .541 | | | | | | |
| Strategies regarding profit making has an impact on investor decision. | .487 | | | .448 | | | |
| Brand name of the company has an impact on investment decision | .434 | | | .431 | | | |
| Accounting policies and Notes has an impact on investor's decision | .593 | | | | | | |
| Industrial sector sustainability analysis has an impact on investor's perception | .629 | | | | | | |
| Information about Employees satisfaction level has an impact on Investors decision | .652 | | | 412 | | | |
| Comparison between the companies performance has an impact on investor's decision | .625 | | | 459 | | | |
| Investor uses Future prospects related information for making an investment decision | .441 | | .508 | | | | |
| Global factors have an impact on investment decision | .426 | | .504 | | | | |
| Investor consider macro economic factors (GDP /Growth Rate) for making investment decision? | .435 | | .444 | | | | |
| Discussion of the major factors likely influence following year's results | | | | | .630 | | |
| Investor consider total public and management expenditure. | | | | | .633 | | |
| Code of ethics or fiduciary oath of the company has an impact on investment decision | | | | | | .450 | |
| Gain or loss of valuation of investment and other assets has an impact on investor decision | | | | 441 | | | .514 |
| Extraction Method: Principal Component | Analys | sis. | • | | | | |
| a. 8 components extracted. | | 1 | | | | | |

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| Rotated Compone | ent M | latrix ^a | I | | | | | |
|---|-------|---------------------|------|------|-------|------|------|---|
| | | | | Com | onent | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Investor consults research reports in Newspaper | | | | | | .628 | | |
| Investor consult Microeconomic Analysis | | | | | | .542 | | |
| Investor consults Technical and Statistical Analysis | | | | | | .786 | | |
| Investor consult research reports on stock market related Websites? | | | | | .627 | | | |
| News stories in the media have an impact on your investment decision? | | | | | .762 | | | |
| Investment decision of the company have an impact on in decision making for the your stock? (e.g- company purchases stock of another company) | | | | | .740 | | | |
| Accounting information has an impact on investment decisions | | | .460 | | | | | |
| Rate of return on Investment have an impact on investment decision? | | | .703 | | | | | |
| Information related to risk has an impact on investment decision | | | .814 | | | | | |
| Market regulations has an impact on investment decision. | | | .737 | | | | | |
| Business partners / Customers / Suppliers/ Competitors have an impact on investment decision | .493 | | | | | | | |
| Nature of competition in the Industry have an impact on investment decision | .695 | | | | | | | |
| Size of the company have an impact on investment decision | .717 | | | | | | | |
| Strategies regarding profit making has an impact on investor decision. | .654 | | | | | | | |
| Brand name of the company has an impact on investment decision | .487 | | | | | | | |
| Accounting policies and Notes has an impact on investor's decision | | .523 | | | | | | |
| Industrial sector sustainability analysis has an impact on investor's perception | | .577 | | | | | | |
| Information about Employees satisfaction level has an impact on Investors decision | | .819 | | | | | | |
| Comparison between the companies performance has an impact on investor's decision | | .811 | | | | | | |
| Investor uses Future prospects related information for making an investment decision | | | | .739 | | | | |
| Global factors have an impact on investment decision | | | | .826 | | | | |
| Investor consider macro economic factors (GDP /Growth Rate) for making investment decision? | | | | .693 | | | | |
| Discussion of the major factors likely influence following year's results | | | | | | | .603 | |
| Investor consider total public and management expenditure. | | | | | | | .832 | |

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| Code of ethics or fiduciary oath of the company has an impact on investment decision | | | | .720 |
|--|--|--|--|------|
| Gain or loss of valuation of investment and other assets has an impact on investor decision | | | | .773 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

| Compo nent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------|----------------------------|------|------|------|------|------|------|-----------|
| 1 | .576 | .650 | .019 | .413 | 160 | 086 | .165 | .119 |
| 2 | 005 | .089 | .701 | .126 | .572 | .395 | .041 | 011 |
| 3 | 315 | .042 | 582 | .574 | .379 | .273 | .101 | - .043 |
| 4 | .657 | 447 | 186 | 065 | .226 | .093 | .246 | .457 |
| 5 | 071 | .082 | 119 | 391 | 044 | .310 | .764 | .375 |
| 6 | .082 | 123 | 044 | 013 | .551 | 683 | .098 | .444 |
| 7 | 137 | 469 | .336 | .560 | 370 | 176 | .405 | .044 |
| 8 | .325 | 354 | 083 | .113 | 101 | .400 | 379 | .660 |
| | ction Metho n Method: J | | | | | | | |

Component Transformation Matrix

| Component Scor | Component Score Coefficient Matrix | | | | | | | | | | | |
|--|------------------------------------|------|------|------|------|------|------|------|--|--|--|--|
| | Component | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Investor consults research reports in Newspaper | .005 | .017 | .007 | 032 | .036 | .398 | 032 | .084 | | | | |
| Investor consult Microeconomic Analysis | 007 | 113 | .028 | .124 | 063 | .337 | .082 | 002 | | | | |
| Investor consults Technical and Statistical Analysis | .032 | .083 | 057 | 086 | 053 | .537 | 107 | 044 | | | | |
| Investor consult research reports on stock market related Websites? | .078 | .035 | 092 | 023 | .349 | .070 | 068 | .037 | | | | |
| News stories in the media have an impact on your investment decision? | .030 | 015 | 057 | 013 | .418 | 020 | .006 | 009 | | | | |
| Investment decision of the company have an impact on in decision making for the your stock? (e.g- company purchases stock of another company) | 007 | 043 | .061 | .033 | .399 | 122 | .075 | .004 | | | | |
| Accounting information has an impact on investment decisions | 104 | .148 | .188 | 087 | .171 | 038 | .067 | 175 | | | | |
| Rate of return on Investment have an impact on investment decision? | .044 | .036 | .307 | 078 | .000 | .032 | .011 | .030 | | | | |
| Information related to risk has an impact on investment decision | 090 | 021 | .404 | .058 | 041 | 119 | .101 | 096 | | | | |
| Market regulations has an impact on investment decision. | .058 | 106 | .340 | .077 | 135 | .154 | 118 | .168 | | | | |
| Business partners / Customers / Suppliers/ Competitors have an impact on investment decision | | 043 | .135 | .039 | .069 | 095 | 191 | .011 | | | | |
| Nature of competition in the Industry have an impact on investment decision | .353 | 050 | 040 | 053 | .074 | 024 | 113 | .093 | | | | |

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| Size of the company have an impact on investment decision | .349 | .013 | 079 | 058 | .103 | 003 | 095 | .042 |
|---|------|------|------|------|------|------|------|------|
| Strategies regarding profit making has an impact on investor decision. | .296 | 074 | .017 | 011 | 071 | .071 | .123 | 022 |
| Brand name of the company has an impact on investment decision | .180 | 099 | .077 | .106 | 177 | .055 | .235 | 180 |
| Accounting policies and Notes has an impact on investor's decision | .097 | .246 | 074 | 105 | .035 | 005 | .111 | 100 |
| Industrial sector sustainability analysis has an impact on investor's perception | .005 | .244 | .011 | .065 | 064 | .059 | .004 | 099 |
| Information about Employees satisfaction level has an impact on Investors decision | 045 | .410 | .007 | 096 | .025 | 021 | 074 | .028 |
| Comparison between the companies performance has an impact on investor's decision | 132 | .405 | .022 | 009 | .016 | 022 | .002 | 015 |
| Investor uses Future prospects related information for making an investment decision | 099 | .063 | 006 | .374 | 005 | 024 | 059 | 024 |
| Global factors have an impact on investment decision | 051 | 053 | .033 | .448 | .018 | 062 | 037 | .046 |
| Investor consider macro economic factors (GDP /Growth Rate) for making investment decision? | .078 | 131 | 012 | .376 | 023 | .064 | .074 | .011 |
| Discussion of the major factors likely influence following year's results | .033 | .058 | 093 | 081 | .086 | .087 | .350 | .106 |
| Investor consider total public and management expenditure. | 100 | 032 | .072 | .029 | 009 | 110 | .571 | 026 |
| Code of ethics or fiduciary oath of the company has an impact on investment decision | .032 | 037 | .049 | 006 | .042 | 105 | .102 | .517 |
| Gain or loss of valuation of investment and other assets has an impact on investor decision | .003 | 066 | 034 | .035 | 044 | .101 | 068 | .592 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Based on the above principal component variable analysis following variables has been identified:

| S. No. | Variable | Factors in variable | | |
|---|---|--|--|--|
| $01 \frac{\text{str}}{\text{an}}$ | Business environment and strategic implementation has an impact on investment perception | Size of the company have an impact on investment decision | | |
| | | Nature of competition in the Industry have an impact on investment decision | | |
| | | Strategies regarding profit making has an impact on investor | | |
| | | Business partners / Customers / Suppliers/ Competitors have an impact on investment decision | | |
| | | Brand name of the company has an impact on investment decision | | |
| 02 $\begin{bmatrix} s \\ a \end{bmatrix}$ | Employees satisfaction , sustainable and competition | Information about Employees satisfaction level has an impact on Investors decision | | |
| | | Comparison between the companies performance has an impact on investor's decision | | |
| | | Industrial sector sustainability analysis has an impact on investor's perception | | |
| | | Accounting policies and Notes has an impact on investor's decision | | |

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| 03 | Risk adherence and regulatory impact on investment | Information related to risk has an impact on investment decision | | | | |
|--|---|---|--|--|--|--|
| | | Market regulations has an impact on investment decision. | | | | |
| | | Rate of return on Investment have an impact on investment decision? | | | | |
| | | Accounting information has an impact on investment decisions | | | | |
| | Globalization and future prospects impact on | Global factors have an impact on investment decision | | | | |
| | | Investor uses Future prospects related information for making an investment risk decision | | | | |
| | Investor consider macro economic factors (GDP /Growth Rate) for making investment decision? | | | | | |
| | | News stories in the media have an impact on your investment decision? | | | | |
| | Investment decision of the company have an impact on in decision making for the your stock? (e.g- company purchases stock of another company) | | | | | |
| | | Investor consult research reports on stock market related Websites? | | | | |
| Financial report analysis ha 06 an impact Investmen perception | Financial report analysis has | Investor consults Technical and Statistical Analysis | | | | |
| | an impact Investment | Investor consults research reports in Newspaper | | | | |
| | Investor consult Microeconomic Analysis | | | | | |
| 07 Discussion of major factors and expenditure | Discussion of major factors | Investor considers total public and management expenditure. | | | | |
| | Discussion of the major factors likely influence following year's results | | | | | |
| 08 | Impact of valuation and ethical conduct on investment perception | impact on investor decision | | | | |
| | | Code of ethics or fiduciary oath of the company has an impact on investment decision | | | | |

CONCLUSION

The objective of this paper is to increase our understanding of the factors associated with investors perception towards corporate disclosure , by studying a investor's decision towards investment based on voluntarily disclose information that are prevailing in the market . By focusing on the type of information that investor uses to apprehend its investment decision , the factor analysis helped us to identify the prominent factors which were majorly contributing in the decision of investors. We have been able to identify 8 principal components that has majorly contributed to investors perception towards its investment horizons. Variable that came out was :

- 1. Business environment and strategic implementation has an impact on investment perception which was mainly contributed by factors like size, nature of competition, brand name.
- 2. Employees satisfaction, sustainable and competition approach has an impact on investment which were based on comparison, industrial sector sustainability, Accounting information ad employee satisfaction.
- 3. Risk adherence and regulatory impact on investment has an impact and these were based on factors like Information related to risk has an impact on investment decision, Market regulations has an impact on investment decision, rate of return on Investment have an impact on investment decision and Accounting information has an impact on investment decisions.
- 4. Globalization and future prospects impact on investment and these were based on the factors like global factors, future prospects and macro economic factors.

- 5. Information disclosed has an impact on investment decision were based on the factors like news story in media, investment decision of company and research reports.
- 6. Financial report analysis has an impact Investment perception was based on the factors like technical and statistical analysis, reports in news paper and micro economic analysis.
- 7. Discussion of major factors and expenditure was based on the factors like management expenditure and companies yearly results.
- 8. Impact of valuation and ethical conduct on investment perception were based on the factors like gain or loss of valuation of investment and code of ethics

Finally, our analysis sheds light on an important factors associated with investors perception about quantitative and qualitative information and disclosure practices adopted by companies as well .Specifically, we provide a testable explanation for why investment response coefficients are larger (smaller) when the firm reports good (bad) news, and we predict that voluntary disclosures should be more common the more extreme the news.

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RIGHT TO EDUCATION: A STEP TOWARDS SUSTAINABLE GROWTH WITH SPECIAL REFERENCE TO ODISHA

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ABSTRACT

Development of society is significantly and positively related to education. Education is a preparation for living life and development. The development of a nation is not measured through the constructions it has built, but by the human resources, the nation has developed through a well developed system of education. Therefore education is a necessary aspect of life. Without education it is impossible to lead a happy and satisfied life. A healthy and educated society needs educated people, which ultimately have the potential to form an educated, prosperous and powerful country. This contributes towards sustainable and inclusive growth in the long run.

Keywords: Education, Inclusive, Growth, Sustainable

INTRODUCTION

"If we want to reach real peace in this world, we should start educating children"-

Mahatma Gandhi

Education is now widely valued not only for its intrinsic value in enriching the lives of individuals but also for its functional value in the development of the human capital of a nation. Educational investments in children have been shown to have high private and social returns. The private returns are associated with increased productivity and earnings in adulthood, and with further non-pecuniary gains arising from the greater efficiency with which educated individuals are able to acquire and process information (Rosenzweig 1995)¹. The social premium to education over and above the private value includes further productivity increases arising from knowledge spillovers, gains in health for one generation that flow from gains in education for the previous, and the improved functioning of civic society and democracy. These examples illustrate that widespread education not only helps growth through productivity effects, but is also crucial to distribution of the gains from growth. Growth in a society in which most people have a basic education is most likely more pro-poor than growth in a society in which the educated are the elite few.

It goes without saying that the children's rights have been given a central place in all the international as well as national bodies. As the Universal Declaration of Human Rights (1948) under its Article 26 states," everyone has the right to free education at least at the elementary and the fundamental stages and it shall be compulsory". Similarly various rights of children dealing with their development as better human beings have been defined under various articles of Indian Constitution like Article 24 prohibits employment of children in any kind of industry or any other harmful occupation. Article 39 prevents abuse and exploitation of the child and Article 45 provides free and compulsory education up to 14 years and by the Article 47 states have been made responsible for improvement in the level of nutrition, living conditions and public health. Even the group of G-8 nations has endorsed that investment in education is a paramount factor for achieving the sustainable and inclusive growth.

JOURNEY OF RIGHT TO EDUCATION ACT IN INDIA

The Right to Education Legislation: A history The Right to Education legislation has a long and chequered history, having been subjected to numerous rounds of heated debate and philosophical and semantic alterations. It was tailored into existence in the period following the passage of the 86th Constitutional amendment in 2002, which declared Education a fundamental right of all children in the age-group of 6-14. A participatory process of inviting comments from members of the public yielded several different drafts of the bill in the subsequent years until finally, in 2008, the Union Cabinet stamped its seal of approval on it and it was placed before the Rajya Sabha which passed it in July 2009. The bill then proceeded to the Lok Sabha, where it was passed in August 2009. The Right of Children to Free and Compulsory Education Act, 2009 (RTE Act) has a long and cherished history. The right to education was discussed extensively during the drafting of the Constitution. The Constituent Sub-Committee on Fundamental Rights included the right to primary education as a fundamental right. However the Advisory Committee of the Constituent Assembly rejected this proposal and placed it in the category of non-justifiable fundamental rights (later known as Directive Principles of State Policy). The first official recommendation for the inclusion of a fundamental right to education was made in 1990 by the Acharya

¹ Rosenzweig, M.1995, "Why are there returns to schooling", *American Economic Review*, 85(2), May, 153-158.

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Ramamurti Committee. Thereafter, several political as well as policy level changes influenced the course of free and compulsory education. The country witnessed an increased international focus on its initiatives regarding free and compulsory education after its participation in the World Conference on Education for All in 1990. India also ratified the United Nations Convention on Rights of the Child in 1992. The Supreme Court first recognised the right to education as a fundamental right in Mohini Jain v. Union of India (1992) 3 SCC 666. It was observed in this judgment that: 'Right to life' is the compendious expression for all those rights which the courts must enforce because they are basic to the dignified enjoyment of life. It extends to the full range of conduct which the individual is free to pursue. The right to education flows directly from right to life. The right to life under Article 21 and the dignity of an individual cannot be assured unless it is accompanied by the right to education. The State Government is under an obligation to make endeavour to provide educational facility at all levels to its citizens. In 1993 the Supreme Court narrowed the ambit of the fundamental right to education as propounded in the Mohini Jain case in the case of J P Unnikrishnan vs. State of Andhra Pradesh, 1993 SCC (1) 645. The Court observed that: The right to education which is implicit in the right to life and personal liberty guaranteed by Article 21 must be construed in the light of the directive principles in Part IV of the Constitution. So far as the right to education is concerned, there are several articles in Part IV which expressly speak of it. Article 41 says that the "State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickens and disablement, and in other cases of undeserved want". Article 45 says that "the State shall endeavour to provide, within a period of ten years from the commencement of this constitution, for free and compulsory education for all children until they complete the age of fourteen years". Article 46 commands that "the State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation...... The three Articles 45, 46 and 41 are designed to achieve the said goal among others. It is in the light of these Articles that the content and parameters of the right to education have to be determined. Right to education, understood in the context of Articles 45 and 41, meant: (a) every child/citizen of this country has a right to free education until he completes the age of fourteen years and (b) after a child/citizen completes 14 years, his right to education is circumscribed by the limits of the economic capacity of the state and its development. We may deal with both these limbs separately. In 2002, the 86th amendment to the Constitution introduced Article 21-A making the right to education a fundamental right. For the first time in independent India's history a fundamental right had been added to the Constitution. Unlike other fundamental rights the right to education required an enabling legislation to become effective. The RTE Act is this enabling legislation. The RTE Act came into force on April 1, 2010.²

December 2002

86th Amendment Act (2002) via Article 21A (Part III) seeks to make free and compulsory education a Fundamental Right for all children in the age group 6-14 years.

October 2003

A first draft of the legislation envisaged in the above Article, viz., Free and Compulsory Education for Children Bill, 2003, was prepared and posted on this website in October, 2003, inviting comments and suggestions from the public at large.

2004

Subsequently, taking into account the suggestions received on this draft, a revised draft of the Bill entitled Free and Compulsory Education Bill, 2004.

June 2005

The CABE (Central Advisory Board of Education) committee drafted the, Right to Education" Bill and submitted to the Ministry of Human Resources and Development (MHRD). MHRD sent it to NAC (National Advisory Council). NAC sent the Bill to Prime Minister for his observation.

14th July 2006

The finance committee and planning commission rejected the bill citing the lack of funds and a model bill was sent to states for the making necessary arrangements. (Post-86th amendment, states had already cited lack of funds at State level) July 19, 2006 Campaign against Child Labour (CACL), National Alliance to Fundamental Right to Education (NAFRE), CABE invited Indian Literacy Project (ILP) and other organizations for a

² www.mhrd.gov.in/rte

Planning meeting to discuss the impact of the Parliament action, initiate advocacy actions and set directions on what needs to be done at the district and village levels.

PRESENT

The present Act has its history in the drafting of the Indian constitution at the time of Independence. However, are more specifically to the Constitutional Amendment that included the Article 21 A in the Indian constitution making Education a Fundamental Right. This amendment, however, specified the need for a legislation to describe the mode of implementation of the same which necessitated the drafting of a separate Education Bill. The rough draft of the bill was composed in year 2005. It received much opposition due to its mandatory provision to provide 25% reservation for disadvantaged children in private schools. The subcommittee of the CABE which prepared the draft Bill held this provision as a significant prerequisite for creating a democratic and egalitarian society. Indian Law commission had initially proposed 50% reservation for disadvantaged students in private schools. The government drafting this piece of legislation, however lost the elections, and the new government came up with its own version. This passed the approval of the cabinet on November 1, 2008, was tabled in Parliament in 2008 and passed in 2009.\

PASSAGE

The bill was approved by the cabinet on July 2, 2009. Rajya Sabha passed the bill on July 20, 2009 and the Lok Sabha on August 4, 2009. It received Presidential assent and was notified as law on September 3, 2009 as the Children's Right to Free and Compulsory Education Act.³

SALIENT FEATURES OF RIGHT TO EDUCATION (RTE) ACT

The RTE Act provides for the:

- Right of children to free and compulsory education till completion of elementary education in a neighbourhood school.
- It clarifies that 'compulsory education' means obligation of the appropriate government to provide free elementary education and ensure compulsory admission, attendance and completion of elementary education to every child in the six to fourteen age group. 'Free' means that no child shall be liable to pay any kind of fee or charges or expenses which may prevent him or her from pursuing and completing elementary education.
- It makes provisions for a non-admitted child to be admitted to an age appropriate class.
- It specifies the duties and responsibilities of appropriate Governments, local authority and parents in providing free and compulsory education, and sharing of financial and other responsibilities between the Central and State Governments.
- It lays down the norms and standards relating inter alia to Pupil Teacher Ratios (PTRs), buildings and infrastructure, school-working days, teacher-working hours.
- It provides for rational deployment of teachers by ensuring that the specified pupil teacher ratio is maintained for each school, rather than just as an average for the State or District or Block, thus ensuring that there is no urban-rural imbalance in teacher postings. It also provides for prohibition of deployment of teachers for non-educational work, other than decennial census, elections to local authority, state legislatures and parliament, and disaster relief.
- It provides for appointment of appropriately trained teachers, i.e. teachers with the requisite entry and academic qualifications.
- It prohibits (a) physical punishment and mental harassment; (b) screening procedures for admission of children; (c) capitation fee; (d) private tuition by teachers and (e) running of schools without recognition,
- It provides for development of curriculum in consonance with the values enshrined in the Constitution, and which would ensure the all-round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child friendly and child centred learning

³ Uma, 2013, Right To Education (RTE): A Critical Appraisal, IOSR Journal of Humanities And Social Sciences (JHSS), Vol.6, Issue (Jan-Feb 2013),pp 55-60.

THE STATUS OF RTE IN ODISHA

The State Government is committed to the Universalisation of Elementary Education in the State with the aim of fulfilling the constitutional obligation with the assistance of Central Government.

Universalisation of Elementary Education

Keeping in view the need for Universalisation of Elementary Education, there has been expansion at Primary and Upper Primary School stage of education, in the Government sector, especially in rural areas as well as backward areas.

Status of Elementary Education in the State

- In Orissa there are 35928 Primary and 20427 Upper Primary schools to provide education at elementary level. More 491 New Primary and 490 New Upper Primary schools opened under SSA to provide schooling in unserved areas.
- 66 lakh children of 6 to 14 years age group are in-school, out of which 12 lakh are SC and 17 lakh are ST.
- 1.87 lakh children of 6 to 14 years age group are out-of-school from which 0.3 lakh are from SC and 0.9 lakh are from ST community. Out of them 56,995 Children were admitted to regular existing & New Schools under Enrolment Drive in districts.

Further to improve access to Elementary Education and to achieve 100% enrolment, Government have relaxed the norm for opening of new primary schools as follows

- In KBK districts and Tribal Sub Plan areas new primary schools will be opened in habitations having at least 25 children in the 6 14 years age group provided there is no primary school within one KM of such habitations.
- In all the districts the distance norm for opening of new primary and new upper primary schools is relaxed in case of natural barrier like river, hilly terrain, dense forest etc.

There are 218 Minority and Mission Managed Primary Schools, wherein 599 teachers are receiving grant-in-aid from the Government. Besides, Oriya Medium Schools functioning in the neighbouring States are also being provided with financial assistance from Government of Orissa.

Grant-In-Aid

There are 691 numbers of privately managed, aided, Upper Primary Schools in the State. To man these schools, 1568 teaching and non-teaching staff are receiving grant-in-aid. Government is providing GIA (Block Grant) to the 867 eligible Upper Primary (ME) Schools as per the provision laid down in OE Act 1969 and Orissa Education Payment of GIA Order 2004.

Supply of Free Textbooks

Free Text Books have been supplied to all the block points to be distributed to all students in the elementary level (Govt. & Aided) including Class-VIII in the year 2010-11. Free text books have also been supplied to the Odia students residing in outside States such as Andra Pradhesh, Gujarat, Jharkhand, West Bengal and Maharastra. Free Urdu Text Books have been supplied to students reading in Govt. Aided Madrasas.

Major Decisions Taken

- 14089 nos. of Sikshya Sahayaks who have completed 6 years of continuous of service have been regularized as Primary school teachers under Zilla Parishad.
- Government has decided to extend the benefit of Block Grant to the Teaching staff of Madrasa at primary level.
- As per Census 2011 population of Odisha is 4,19,74,218. Out of this the Rural population of Odisha is 3,49,70,562 and Urban population is 70,03,656.
- During the period, out of 52,73,194 Child Population in the age group 0-6 years recorded in the State 45,25,870 are concentrated in rural areas whereas in urban areas it is 7,47,324.
- The number of literates in Odisha is 2,67,42,595 out of which 2,13,77,915 are recorded in rural areas whereas in urban areas the number of literates recorded is 53,64,680.
- The literacy rate of Odisha as per 2011 Census is 72.9 per cent. In rural areas the literacy rate is 70.2 per cent whereas in urban areas it is 85.7 per cent. The male rural literacy rate is 79.6 per cent whereas the female literacy rate in rural area is 60.7 per cent. The male literacy rate in urban area is 90.7 per cent and in case of females the literacy rate is 80.4 per cent. Among the districts the highest literacy rate in rural areas

noticed is in the district of Jagatsinghpur (86.5%) whereas the highest literacy rate in urban areas recorded is in the district of Khordha (91.0%). The lowest literacy rate of 43.9 per cent is recorded in the rural areas of Nabarangpur district whereas the lowest urban literacy rate of 74.5 per cent is recorded in the district of Malkangiri. The highest male literacy rate of 92.5 per cent is recorded in the rural areas of Jagatsinghpur district whereas the highest urban male literacy rate recorded is in the district of Khordha (94.2%). The lowest rural male literacy rate is recorded in the district of Koraput (54.1%) whereas the lowest urban male literacy rate is recorded in the district of Malkangiri (83.4%). The highest female literacy rate in rural areas is noticed in the district of Jagatsinghpur (80.4%) whereas the lowest rural female literacy rate recorded is in the district of Koraput (31.3%). The highest urban female literacy rate of 87.5 per cent is recorded in the district of Malkangiri.⁴

CONCLUSION

Although the efforts of Odisha state towards achieving literacy is satisfactory yet it has to work further on elementary and female education and effective implementation of RTE Act in the State in order to strive towards sustainable and inclusive growth.

SUGGESTIONS FOR SUSTAINABLE AND INCLUSIVE GROWTH

- ✓ Steps must be taken to prevent child labour as child labour is the root cause of lack of enrolment and increase in drop outs in the schools.
- ✓ More number of NCLP (National Child Labour Project) schools should be established in every district.
- ✓ Parents' counselling centres to be established in every block so as to counsel parents to send their children to schools instead for work.
- ✓ Vocational training should be given more importance and in should be introduced not only at high school levels but also at secondary and primary levels.
- ✓ Apart from mid day meal programmes other incentives like scholarship must be introduced for the students on completion of their school education at primary, secondary and high school levels.
- \checkmark Focus should be given to tribal areas in order to improve elementary and female education.

⁴ www.odishagov.in/school education

MANUSCRIPT SUBMISSION

GUIDELINES FOR CONTRIBUTORS

- 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.
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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:

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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.

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• 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.

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Holloway, M. (2005, August 6). When extinct isn't. Scientific American, 293, 22-23.

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