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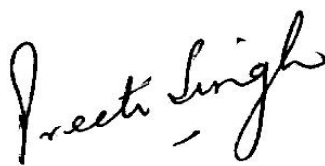
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Editor's Desk

Coronavirus is a deadly disease. It started from Wuhan city in China. How does it fit in a management journal? It has created a lot of stir all over the world. The Chinese people are not allowed to enter certain countries for fear of carrying the disease to other countries. However, world is a global family and what happens in one country affects the other countries, directly or indirectly. This disease has affected many countries as business has begun to suffer due to interactive and networking to manufacture and sell products. The large global companies look for opportunities in different countries. Raw materials are sourced in one country, products are manufactured in another country and sold in some other countries. China's economy accounted for roughly 4% of world GDP in 2003; it now makes up 16% of global output.

China was the largest and most economical producer of fabrics and a global heaven for garment designers. They produced the most beautiful material in the world. With coronavirus affecting China the exporters have lost a lot of business as goods cannot be manufactured in time. Large orders are pending and importers of other countries feel that they have lost a lot of business. Designers and stores are not able to source the raw material, thus creating a void in business. Apple manufacturer product of i-Phones feels that business in China was double that of the US designed phone. Business will now be less prosperous since the sales will fall in China. Further Qualcomm the largest manufacturer of smart phone chips felt threatened with the uncertainty of business due to Coronavirus spread in China. The automobile industry has also suffered. Leading manufacturer like Volkswagen, Toyota, Daimler, General Motor, Renault, Honda and Hyundai had to close production while the virus was attacking the people in China. This would certainly bring down the global business. Luxury goods like Burberry from Great Britain had to close its stores in China due to the viral bringing down its sales. Many airlines had to close operations of flights passing through China. This would create a disruption bringing a problem in Global growth.

Economic analysts believe that the world is going to have a severe damage in business and should be prewarned of a financial crisis like the last one in 2008. However, there is hope as some consultants like Jennifer McKeown head of the global economics service consultancy is optimistic that the world will fight with the disease and restrict it to have a limited negative impact on business and countries soon. What is the lesson for the future? A lesson for business and management is to invest in strategic, operational and financial resilience to combat with future global risks of health and other issues.



(Preeti Singh)

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THE IMPACT OF CAPITAL STRUCTURE ON SMES IN THE SELECTED COUNTRIES - A STUDY ON INDIAN, MALAYSIA, SINGAPORE AND THAILAND

Nenavath Sreenu*

The present research paper examines relationship between the capital structure impacts on SMEs performance. The study test hypothesis is that financial leverage positively affects SMEs (Malaysia, India, Thailand and Singapore) activity through disciplining managers, but the main important components has considered for this paper tax shield and signalling effects. According to Modigliani & Miller (1958, 1963) the analysis of the capital structure decisions has been significant area of research inside the field of finance. In present study it is SMEs and examined whether the factors that affect capital structure are the same for companies belonging to these different size-based groups of SMEs. In besides, given that considerable proportions of SMEs from selected countries have zero long-term debt, the paper analysed the determinants of the probability that a SMEs is using long-term debt financing are the same as determinants of the proportion of this type of financing in capital structure.

Keywords: Debt Ratio, Financial, Leverage, Capital Structure and SMES Performance.

Modigliani and Miller's (1958, 1963) capital structure irrelevance theory proposals have interested debates among the financial economists concerning the finest capital structure theory of a firm. In the study of Modigliani and Miller's world, capital structure is irrelevant theory for the value of a public sector companies in the selected countries. Notwithstanding the fact that a number of subsequent leverage ratio relevance theories have tried to incorporate market imperfections, the present empirical research paper suggests that these theories are still not accurate enough to explain the broad patterns of firms' financing decisions in the selected Country industries. The research study has given explanation about the Capital structure theory is a significant and critical resource for all public sector companies. The capital structure can be divided into two type that is equity and debt. Equity arises when companies sell some of its ownership rights to gain funds for operation and investing activities. Debt is a contractual agreement, whereby companies borrow an amount of money and repay it with interest within a stipulated time frame. The paper adopted an appropriate capital structure is a critical decision for any business organization. The decision is significant not only because of the need to maximize returns to the shareholders, but it is also important because of the impact of such decision on a public sector companies in selected countries' ability to deal with its competitive environment. This paper examination the descriptive power of some of the theories that have been projected in the literature to explain variations in capital structures across firms. In specific,

this paper examines capital structure determinants of SMEs firms' performance based on a panel data set from 2005 to 2016 comprising about 300 companies in the four countries. In future this research study will utilize panel data regression analysis to empirically examine the impact of different determinants on three leverage measures: total debt ratio, short-term debt ratio, and long-term debt ratio.

I. Review of Literature

Theories of capital structure

From last five 40 years' different theories has been illustrating and determination about the capital structure decisions, the capital structure decision model was developed, but as Myers (2001,) "there is no universal theory of the debt-equity choice and no reason to expect one". However, he has mentions that there are several conditional useful theories. As Frank & Goyal (2008) describe, both the pecking order theory and the trade-off theory can be considered as 'point-of-view' theories, which are not explicit models, but provide some guidelines for the development of models and tests.

The Modigliani – Miller theory

The Modigliani & Miller (1958) investigation is

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constructed theory based on some assumption that a probability distribution of the industries cash flows does not depend on the capital structure decision it makes and that all investors share the same expectations regarding the cash flows. The research paper also assumes that there is a perfect capital market condition, where investors, who act rationally and are well informed, are free to buy and sell securities and can borrow funds at the same terms as companies do.

According to Frank & Goyal (2008), there are two fundamentally different types of the capital structure irrelevance proposition. The classic foundation of the Modigliani-Miller hypothesis is an arbitrage process, which enables investors to pursue homemade leverage by switching their investments from an unlevered firm to a levered firm or vice versa. By borrowing on a personal account at a risk-free rate and buying shares of the unlevered firm investors can create homemade leverage.

Miller (1977) considers both personal and corporate taxes, which determine the equilibrium level of aggregate corporate debt and, hence, an equilibrium debt-equity ratio for a whole corporate sector. MM made certain assumptions on their study which are also known as assumptions of perfect competitive capital market and they include;

1. There are no taxes.
2. There are no transaction costs.
3. All market participants have equal information and equal opportunities, there is no information asymmetry.
4. Lending and borrowing at risk free interest rate.
5. Firms issue only two types of claim; risk free debt and (risky) equity.
6. Cash flows streams are perpetuities.
7. Operating cash flow stream are independent of debt or equity considerations.

The trade-off theory

A family of related theories is described under the term of the trade-off theory. The idea, which is general in all of these theories, is that a manager running a company assesses benefits and costs of alternative leverage plans. However, trade-off theories might differ in the way they recognize a role of time in capital structure decisions. This leads to two different types of the trade-off theory, they made the following conclusion based on their static trade-off model:

1. An increase in the costs of financial distress reduces the optimal debt level.
2. An increase in non-debt tax shields reduces the optimal debt level.

3. An increase in the personal tax rate on equity increases the optimal debt level.
4. At the optimal capital structure, an increase in the marginal bondholder tax rate decreases the optimal level of debt.
5. The effect of risk is ambiguous, even if uncertainty is assumed to normally distribute. The relationship between debt and volatility is negative. Namely the static trade-off theory and the dynamic trade-off theory.

Agency Cost Theory

The research study has considered second important theory in the literature is the agency cost theory. This theory was developed by Jensen and Mackling in their 1976 publications. This theory considered debt to be a necessary factor that creates conflict between equity holders and managers. Both scholars used this theory to argue that the probability distribution of cash flows provided by the firm is not independent of its ownership structure and that this fact may be used to explain optimal capital structure. Grossman and Hart (1982) argued that debt can reduce agency costs by increasing the possibility of bankruptcy and providing a managerial discipline. Bradley et al. (1984) found that volatility in earnings will increase bankruptcy costs and this in turn will increase the agency costs, therefore, companies tend to use less debt.

Ryen et al. (1997) provide a theoretical summary of agency cost theory. According to Ryen et al., two sets of agency problems were faced by firms, conflict between managers and stockholders and conflict between stockholders and bondholders. For the managers and stockholders conflict, managers usually overspend or take less leverage and these are seen not benefiting the stockholders.

Signaling Hypothesis

Signaling hypothesis was introduced by Ross (1977) who concludes a positive relationship between profitability and leverage against the pecking order theory which states the negative relationship between profitability and leverage. The basic idea of signalling hypothesis is that the choice of capital structure signals outside investors the information of the insiders. According to Ross, managers, whom are known as insiders know the true distribution of firm returns, but investors do not. The managers feel more 'relax' with equity than debt as debt can lead to managers losing jobs if firms go bankrupt. Knowing this fact, if managers keep on adding more debt in the capital structure of the firms, which reflects a 'signal of higher future cash flow' and their managers'

confidence of the firms. Therefore, investors take large level of debt as a signal of ‘higher quality’ and therefore, profitability is expected to be positively related to leverage. There were mixed results noted in the literature with respect of the effect of signalling on the capital structure decision.

Pecking Order Model

The pecking order model is another important model in the study of capital structure. This model is constructed from the asymmetric information theory. In their seminal paper, Myers and Majluf (1984) develop a model in which the capital structure choice is designed to limit inefficiencies caused by informational asymmetries. Asymmetric information states that firm managers or insider’s possess private information about the firm’s operations and its investment opportunities which are not known by outsider investors. If the firm finance new project by issuing equity, under-pricing may be severe such that the new investors would capture more than the NPV of the new project. This will lead to net loss to the existing shareholders, who rejects the project knowing the NPV of the project is positive. The other issue arises from asymmetric information would be adverse selection problem. A potential adverse selection problem arises as firms with lower value opportunities have incentive to issue securities that imitate firms with higher value opportunities. This behaviour results in a situation where securities of the former firms to be overvalued while the latter firms undervalued.

Objective

1. To study which theory of capital structure explain the financing behaviour of SMEs Firms of the selected countries. Among the capital structure theory specifically tested here include MM, static trade-off theory, and agency cost theory and pecking order hypothesis.
2. To investigate the whether there are variances in the selected variables of firms in different industrial classifications of SMEs. For this purpose, the significance of differences in the mean selected variables between various industries of selected countries is measured.

Hypothesis

1. There is no relationship between the selected determinants factors and capital structure decision
2. Cost of capital and equity financing are not positively related to capital structure decision
3. Financial flexibility and debt financing is not negatively related to capital structure Decision
4. Liquidity ratio is not negatively related to capital structure decision

5. Profitability is negatively related to capital structure decision
6. Firm size is not positively related to capital structure decision
7. Inflation rate is negatively related to capital structure decision
8. There is no difference between factors affecting capital structure
9. There is no difference in capital structure choice among SMEs industries.

II. Research Design & Methods

The research paper after formulating the research problem and objective that intentions to explain the relationship between capital structure and SMEs Firms financial performance using data for companies listed on the World Bank Report and respective countries ministry of finance report, the methodology can solve the problem systematically. It is process consist from techniques to collecting and analysing data, in order to investigate these issues, it is necessary to use appropriate research methodology.

Data Collection

The task of data collection begins after a research problem has been defined and research design/ plan has been drawn. The study has adopted tools of data collection are the primary data are those which are collected afresh and for the first time, and thus happen to be original in character. The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process.

Study Population

The present research study has considered the population consists of all companies listed in respective countries Stock market that consist of more than 150 companies registered in the market and practiced their activities from 2005 to 2016 data has taken from the different type source from the respective countries official website.

Study Sample

The sample among the companies composing all sectors has been chosen for conducting this study after omitting all companies which don’t meet the following criteria. The companies must be listed in respective stock market of the selected countries (India, Malaysia, Singapore and Thailand). The end of financial period of companies lead up to December 31 of each year from 2005 to 2016. The availability of sufficient data such as income statement, balance sheet in order to calculate financial measurement

impact on the capital structure of SMEs in respective Countries. Thus, by considering the above constraints, the investigated sample size was about 150 companies.

Data Analysis and interpretation

The study discloses the information from the table 3 the descriptive statistics for the dependent and independent variables of Indian SMEs. Cost of capital varies the 0.74% with average value ratio of 21.0%. The firm size of the Indian SMEs varies is 0.50% which the mean of value of firm Size 56.7%. The cost of equity and GOP mean ratio are shown from the table 40.6% and 31.6% for the medium scale industries from last ten years. The variance which is rise from the 0.532 to 0.980 with the average value of small scale and medium scale industries in the Indian SMEs values are from 58% and 40.6%. The paper has considered the values of debt financing and equity financing from the above two variables varies from positive impact to high impact on the SMEs St. deviation values are from 0.654 to 0.729 and 0.089 to 1.560. With the average values of debt financing and equity financing shown in the table 1.256 and 1.681 for the equity financing values are 0.581 and 0.696. From the table -4 the range of the average capital structure in the selected countries the total debt of the four countries range is between 13.85 to 23.52 for the small scale industries and for the medium scale industry range in the concern of capital structure are 15.75 to 28.59. With Thailand having lowest mean debt among the selected four countries for the small scale industries. As the stock market is well developed in the four countries with comparison of Singapore has highest total debt. The average total debt ratio is India 34.12%, Malaysia 37.31, Thailand 31.14 and Singapore 51.11, respectively.

The table 5 shows that the evaluation of capital structure in the selected Countries, the capital structure theories measuring with following terms like STDR and LTDR (short-term debt ratio, long-term debt ratio and total debt ratio). The observation from the above table the total long term debt ratio an increasing trend between 2010 and 2014 the ratios are 32.45 and 41.56, the same time long term debt ratio decreases from % in 2007 to 19.58% in 2016. There is an increase to 16.53% in the selected period that indicates a need for higher financial support that led to many companies to having risk of insolvency. Subsequently, it is illustrious that the LTDR and STDR ratio in Indian is increasing at certain period 2010, there is a drop in short-term debt ratio and long-term debt ratio from 5008 to 2012 for all other countries. However, during the crisis period short-term debt ratio and long term debt ratio rises up to from 16.5 to 28.6 from all four countries. It is stimulating to note that in Singapore, short-term loan

and long-term loan are almost equally utilized by Singapore companies in terms of corporate financing.

III. Results & Analysis

The study has selected variables to constructed, determination of firm's value and before running the regressions tool, it was considering how many firms in the sample have the native impact on leverage ratios, so the leverage value show from at 0 level impact on the SMEs. The information shown on average, 41.2% of SMEs in the sample do not have long-term debt in their capital structure. These results are consistent with the previous studies, which also report that substantial proportions of firms follow a zero-debt policy. From table 6 it is also apparent that there is a size effect on the probability that a firm is using long-term debt financing, the percentages of SMEs that do not use long-term debt financing are, on average, 38.08%, 18.8% 15.39% and 27.71 for the subgroups of micro, small and medium companies in the respective countries like India, Malaysia, Singapore and Thailand. Variances among the proportions of Industries that do not have long-term debt are most obvious if subgroups of Malaysia country are compared, while they are least apparent for Indian companies, especially between small and medium-sized Singapore companies. Descriptive statistics of the explanatory variables are testified in Table. The average values of SMEs in four counties the effective tax rate showing on average, the smaller the firm, the lower tax burden it has as effective tax rates are for micro, small and medium sized firms, respectively. However, the median values of the effective tax rate for micro and small companies are zero.

Regression Model

1. Asset Tangibility 2. Financial Flexibility 3. Liquidity 4. Profitability 5. Firm Size 6. Cost of equity 7. Inflation Rate 8. Interest Rate 9. Debt Financing, 10. Equity Financing 11. Equity capital. The research study has tested the Hypothesis 1 and hypothesis 2 by running the regression model on the defined measures of capital structure theories on the projected factors of corporate capital structure using the panel data sample of selected four countries. The study generalized least square (GLS) regression model have been used to run the analysis of the panel data to determine the significance values of selected variables. In this connection, the present research study accepted the white heteroscedasticity corrected standard errors and covariance of the GLS analysis which allowed the solution of the heteroscedasticity problem. Further the study used the statistical method to solve the problem of that the multi-collinearity among the

independent variables which we applied for this study. VIF measures how much the variances of the estimated regression coefficients are inflated as compared to when the determinants are non-linearly related. According to above table observation, if VIF of any independent variable exceed the value of 10, then the variable is said to be highly collinear. The VIF among the independent variables of Malaysia, India, Thailand and Singapore are analysed and tabulated above, it appears that none of the VIF value indicates above the Value of 10 although for Indonesia, inflation rate and GDP growth shows VIF closer to 10.

This shows that multi-collinearity problem does not exist among the proxies for determinants of corporate capital structure in Malaysia, Indonesia, Philippines, Thailand and Singapore. Autocorrelation problem exists in the regression analysis. The Durbin-Watson statistic is tested to see the existence of any autocorrelation problem. Durbin-Watson is actually the ratio of the distance between the errors to their overall variance. If the value is greater than 2, it indicates negative autocorrelation while if the value is less than 2, it indicates positive autocorrelation. In our analysis, it is found that the Durbin-Watson statistic appears below 2 and therefore attempts are made to solve the autocorrelation problem. After going through the process of solving autocorrelation, AR (1) correction is applied and found that the Durbin-Watson statistic improves to a value around 2, with a range between 1.8 to 2.2.

The table 8 displays the regression results of elements of total debt ratio of Indian SMEs companies between 2005 and 2016. From the table the adjusted R squared values is 0.875620 specifies that about values of the variables from the capital structure theories 87.36 percent of the unpredictability of total debt ratio is explained by the firm specific and macroeconomic influenced factors on the capital structure total debt ratio in Indian firms. The F-statistic of 124.5689 draw the conclusion from the above table and suggests that the model fits the data significantly. The Durbin-Watson statistic value of 0.231456 shows that the absence of autocorrelation problem. The t-statistic shows that asset tangibility, liquidity, profitability, Growth, Inflation Rate, cost of capital, debt financing, equity financing and interest rate are significant among the selected factors. First three factor are significant at 1 percent significance level while rest of remain factors are significant at 5 percent significance level. Therefore, the study has drawn the conclusion at this time based on the above table the main first null hypothesis is rejected which indicates that there is relationship between selected factors and total debt ratio of Indian.

MM Hypothesis and static trade-off theory are demonstrated form the strong positive coefficient of selected first four variable of the capital structure theories with a value of 0.090096 and remain variables indicating that the negative impact on the firms, the Keeping other variables constant, a 1 % increase in the ratio of fixed assets over total assets increases the tendency of Indian SMEs companies in engaging total debt by more than 9 percent. Interest rate turned out to be positively related to total debt ratio with the coefficient of 0.001483.

Table 9 displays the regression results of elements of total debt ratio of Malaysia SMEs companies between 2005 and 2016. From the table the adjusted R squared values is 0.356891 states that about values of the variables from the capital structure theories 35.68 percent of the unpredictability of total debt ratio is explained by the firm specific and capital economic influenced factors on the capital structure total debt ratio in Malaysia firms. The F-statistic of 138.25368 the study has given conclusion from the above table and suggests that the model fits the data significantly up to 80 percentages and remain data will not be fit for the determine the values of SMEs. The Durbin-Watson statistic value of 0.452368 shows that the absence of autocorrelation problem. The t-statistic shows that asset tangibility, liquidity, profitability, Growth, Inflation Rate, cost of capital, debt financing, equity financing and interest rate with other variables majority of data is insignificant among the selected factors. First four factor are significant at 1 percent significance level while rest of remain factors are significant at 5 percent significance level. Therefore, the study has drawn the conclusion at this time based on the above table the main alternative hypothesis is rejected which indicates that there is relationship between selected factors and total debt ratio of Malaysia. MM Hypothesis and static trade-off theory are demonstrated form the strong positive coefficient of selected first four variable of the capital structure theories. with a value of 0.090096 and remain variables indicating that the negative impact on the firms, the Keeping other variables constant, a 1 % increase in the ratio of fixed assets over total assets increases the tendency of Indian SMEs companies in engaging total debt by more than 9 percent. Interest rate turned out to be positively related to total debt ratio with the coefficient of 0.001483.

The present table 10 displays the regression results of elements of total debt ratio of Singapore SMEs companies between 2005 and 2016. From the table the adjusted R squared values is 0.549847 specifies that about values of the variables from the capital structure theories 54.98 percent of the unpredictability of total debt ratio is

explained by the firm specific and macroeconomic influenced factors on the capital structure total debt ratio in Indian firms. The F-statistic of 99.25892 draw the conclusion from the above table and suggests that the model fits the data significantly. The Durbin-Watson statistic value of 0.254834 shows that the absence of autocorrelation problem. The t-statistic shows that asset tangibility, liquidity, profitability, Growth, Inflation Rate, cost of capital, debt financing, equity financing and interest rate are significant among the selected factors. First three factor are significant at 1 percent significance level while rest of remain factors are significant at 5 percent significance level. Therefore, the study has drawn the conclusion at this time based on the above table the main first null hypothesis is rejected which indicates that there is relationship between selected factors and total debt ratio of Singapore.

MM Hypothesis and static trade-off theory are demonstrated form the strong positive coefficient of selected first four variable of the capital structure theories with a value 0.148165 of and remain variables indicating that the Positive impact on the firms, the Keeping other variables constant, a 1 % increase in the ratio of fixed assets over total assets increases the tendency of Singapore SMEs companies in engaging total debt.

Table 11 displays the regression results of elements of total debt ratio of Thailand SMEs companies between 2005 and 2016. From the table the adjusted R squared values is 0.853689 specifies that about values of the variables from the capital structure theories 85.36 percent of the unpredictability of total debt ratio is explained by the firm specific and macroeconomic influenced factors on the capital structure total debt ratio in Thailand firms. The F-statistic of 119.8657 draw the conclusion from the above table and suggests that the model fits the data insignificantly.

The Durbin-Watson statistic value of 0.435689 shows that the absence of autocorrelation problem. The t-statistic shows that asset tangibility, liquidity, profitability, Growth, Inflation Rate, cost of capital, debt financing, equity financing and interest rate are significant among the selected factors. First three factor are significant at 1 percent significance level while rest of remain factors are significant at 5 percent significance level. Therefore, the study has drawn the conclusion at this time based on the above table the main first null hypothesis is accepted which indicates that there is relationship between selected factors and total debt ratio of Indian.

Correlation analysis to test the capital structure theories normality in SMEs

The study used correlation statistical tool, the Correlation is a bivariate analysis that measures the strengths of association between two variables. In statistics, the value of the correlation coefficient varies between +1 and -1. When the value of the correlation coefficient lies around ± 1 , then it is said to be a perfect degree of association between the two variables. As the correlation coefficient value goes towards 0, the relationship between the two variables will be weaker. Usually, in statistics, the researcher's measures three types of correlations: Pearson correlation, Kendall rank correlation and Spearman correlation.

The table 12 presents the results from two important tests of normality, specifically the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples), but can also handle sample sizes as large as 2000. Because the data size is more than 200 samples, the study will use the Kolmogorov-Smirnov test to assessing the normality for data. From the table above the Sig. value of the Kolmogorov-Smirnov Test is below 0.05, so the data significantly deviate from a normal distribution. After the test of normality, the researcher will conduct the Spearman rank correlation to measure the degree of association between variables because the data is not normally distributed. The tool used for the determine the significance values of the selected variables, from the table with values the GOP, EBIT, EPS, Debt and Equity are indicated the highly significance in particularly Indian SMEs the values shown the below 0.05 and remain variables of statistically it shown the insignificance. The variables with values ROI- 0.420, ROE-0.006, EDBITA-0.250, Size -0.056 and TDR-0.042.

The table 13 present values of the correlation between the selected variables of the capital structure theories impact on SMEs in table. The researcher has found the positive and negative correlations have been observed between; the negative correlations are between; leverage and Risk (0.235), ROE (-0.423) and return (-0.07). Size has the highest negative correlation with leverage. The variable size also indicates positive correlation to ROE (0.568), EPS (0.758) and risk (0.578). However, the variable size indicates a negative correlation to EBIT (-0.17). The variable ROE (0.452) shows positive correlation to EBIT (0.478) and EPS (0.754) but negative correlation to risk (-0.857). The variable GOP indicate positive correlation to ROE (0.568) but negative to Leverage (0.235). The variables return and risk are positive correlated (0.578).

IV. Conclusion

The research paper investigated the determinants of capital structure of a sample of SMEs in selected four countries firms utilizing panel data analysis. The study used the tools of three different leverage measures based on book values have been applied: total debt ratio, long-term debt ratio, and short-term debt ratio as well as capital structure theories sub variables. The experiential indications provide that there exist significant differences in the determinants of these three leverage measures. The study draws the results of capital structure variable impact on SMEs are negative relationships between Debt Financing and liquidity, while there are positive relationships between equity financing and profitability and size. Profitability, liquidity and asset tangibility are generally significantly related to leverage and these correlations are more evident in terms of short term debt and long term debt. According to the results of the regression analysis, the variable non-debt tax shield is the most important factor, which is measured for the trade-off theory. The other variables are not significant and do not influence the amount of leverage. Many researchers also use firm size to test the trade-off theory, because bigger firms are more stable and it is less risky to borrow debt. Therefore, the result for firm size confirmed the trade-off theory. Although some explanatory variables are persistently significant across time periods, the significance and impact of several capital structure determinants differ with time and, very likely, with the state of the economic climate

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Table 1: Summary of capital structure theories.

Theory	Relationship	Causality
Modigliani and Miller	Positive	Performance affects debt
Gordon Model	Negative	Performance affects debt
Walter Model	Negative	Performance affects debt
Trade-off	Positive	Performance affects debt
Pecking-Order	Negative	Performance affects debt
Free-cash-flow	Positive	Debt affects performance
Signaling	Positive	Performance affects debt
Agency problem	Negative	Debt affects performance

Table 2: Frequencies for all Sectors in the Sample of SMEs.

SMEs	Indian	Malaysia	Singapore	Thailand
	No	No	No	No
Children's Toys	12	7	21	12
Papers and Notebooks	9	14	1	18
Electric Bulb and Electrical Fittings Production	7	25	14	9
Kitchen Utensils and Cutleries Manufacturing	16	14	7	9
Drugs Manufacturing	14	13	9	18
Rugs and Rubber Carpets Manufacturing	18	24	8	14
Manufacturing of Plastic Bottles	21	23	6	16
Fertilizer Production	14	1	6	21
Chemical Production	6	9	12	25
Nails, Nuts and Bolts Manufacturing	5	6	14	24
Tyre Manufacturing	8	7	13	29
Hand Tools Manufacturing	21	8	15	23
Mobile Phones Accessories Manufacturing	23	9	12	31
Automobile Spare Parts Manufacturing	28	12	21	32
Ceramic Tiles Manufacturing	41	16	26	27
Marbles Manufacturing	8	18	28	16
Bags Manufacturing	3	13	34	19
Touch Light Manufacturing	5	16	31	7
Umbrella, Raincoats and Rain boots Manufacturing	6	21	2	9
Foot wares and Belts Manufacturing	11	21	9	10
Musical Instrument	10	28	5	20
Wristwatches and Wall Clocks	2	16	13	24
Stationeries	3	15	13	19
Cement	5	14	16	18
Picture Frames	5	12	12	9
Eye Glasses and Frames	14	10	17	15

Mattress and Pillow	12	10	18	12
Doors Manufacturing	17	10	16	17
Aluminum Products	1	16	24	24
Textile Production	6	14	12	26
Jewelries Production	8	10	34	14
Soaps and Detergent Production	19	9	28	37
Total	378	432	469	567
Average values	22.90909	26.72727	30.12121	36.60606

Table 3: Descriptive statistics for the explanatory variables of SMEs (Indian, Malaysia, Singapore and Thailand).

Variables		Small firms	Medium Firms
Cost of Capital	Mean	0.012	0.210
	Median	0.002	0.008
	St. Deviation	0.568	0.743
Firm Size	Mean	0.058	0.657
	Median	2.503	3.580
	St. Deviation	0.273	0.509
Cost of Equity	Mean	0.058	0.406
	Median	0.253	0.403
	St. Deviation	0.532	0.980
GOP	Mean	2.568	0.316
	Median	3.458	1.860
	St. Deviation	1.869	0.237
Growth	Mean	4.860	5.703
	Median	0.425	0.967
	St. Deviation	0.503	0.057
LIQ	Mean	6.458	2.452
	Median	1.680	0.560
	St. Deviation	4.253	0.530
Profit	Mean	2.560	0.458
	Median	0.568	1.025
	St. Deviation	0.860	0.256
AGE	Mean	5.258	3.964
	Median	0.830	0.379
	St. Deviation	0.008	0.483
Debt Financing	Mean	1.256	1.681
	Median	2.568	2.741
	St. Deviation	0.654	0.729
Equity Finance	Mean	0.581	0.696
	Median	1.325	1.624
	St. Deviation	0.089	1.560

Table 4: Average Capital Structure (Debt ratio) in SMEs by Countries.

SMEs	Indian	Malaysia	Thailand	Singapore
Small	14.56	21.56	13.85	23.52
Medium	19.56	15.75	17.29	28.59
Total	34.12	37.31	31.14	51.11

Table 5: Evaluation of capital structure flow in selected countries SMEs (%) (Short-term debt ratio, long-term debt ratio).

Years	Ratios	Indian	Malaysia	Singapore	Thailand
2005	STDR	14.23	24.35	31.52	23.85
	LTDR	19.58	18.14	12.25	19.52
2006	STDR	17.56	17.56	9.34	14.65
	LTDR	21.56	19.58	18.91	17.28
2007	STDR	24.59	27.54	18.74	21.35
	LTDR	22.42	21.89	24.85	24.36
2008	STDR	15.89	28.70	22.45	20.32
	LTDR	19.45	35.45	28.68	29.52
2009	STDR	17.56	30.45	31.62	19.52
	LTDR	28.45	14.67	37.56	16.85
2010	STDR	32.45	22.48	10.25	22.68
	LTDR	31.40	27.45	16.54	34.15
2011	STDR	19.78	29.20	14.85	32.45
	LTDR	27.56	23.58	35.42	23.67
2012	STDR	17.56	26.85	36.47	29.52
	LTDR	34.50	24.76	30.69	20.51
2013	STDR	37.45	36.47	16.56	26.27
	LTDR	19.56	34.85	28.45	30.36
2014	STDR	41.56	33.75	24.85	25.49
	LTDR	32.89	43.12	27.36	29.53
2015	STDR	13.56	25.45	29.61	20.65
	LTDR	24.23	39.12	31.28	33.26
2016	STDR	28.21	32.12	30.96	23.42
	LTDR	16.53	36.90	24.56	26.96

Table 6: SMEs with zero leverage ratios and negative impact on Capital.

Countries	Small Firms		Medium Firms		Total	
	No	%	No	%	No	%
India	1863	38.98	1167	36.73	3030	38.08
Malaysia	958	20.04	538	16.93	1496	18.80
Singapore	739	15.46	486	15.29	1225	15.39
Thailand	1219	25.50	986	31.03	2205	27.71
Total	4779	100	3177	100	7956	100

Table 7: Collinearity Statistics (VIF) among the selected variables related to Capital Structure theories –SMEs of 4 Countries.

Variables	1	2	3	4	5	6	7	8	9	10	11
Indian											
Tolerance	0.42	0.75	0.46	0.78	0.61	0.19	0.34	0.56	0.41	0.38	0.29
VIF	1.56	1.78	1.98	1.72	1.57	1.96	1.97	1.48	1.98	1.47	1.83
Malaysia											
Tolerance	0.24	0.65	0.85	0.45	0.65	0.86	0.43	0.95	0.37	0.62	0.31
VIF	1.35	2.26	1.56	1.96	1.57	1.63	1.58	1.67	1.95	1.47	1.35
Singapore											
Tolerance	0.52	0.36	0.14	0.74	0.85	0.96	0.25	0.34	0.16	0.37	0.63
VIF	1.56	1.35	1.68	2.45	2.68	1.42	1.96	2.75	1.90	1.84	1.76
Thailand											
Tolerance	0.96	0.42	0.61	0.38	0.37	0.92	0.29	0.75	0.67	0.96	0.54
VIF	1.96	1.37	1.65	1.76	1.95	1.24	1.67	2.36	2.47	1.67	1.37

Table 8: Indian: Regression Results of total debt ratio of MSEs (Sort term debt ratio and long term debt ratio).

Variables of Capital	Coefficient	Std. Error	t-Statistic	Prob.
C	0.02583	0.5693	0.5689296	0.0045
Asset Tangibility	0.04750	0.35486	-2.458908	0.0856
Financial Flexibility	-0.86922	0.48756	-2.645985	0.45870
Liquidity	0.86273	-0.25637	-4.578815	0.00478
Profitability	0.56920	-0.36190	0.4589663	0.65890
Firm Size	-0.45872	-0.23756	0.8756558	0.57890
GDP Growth	-0.5369	-0.45862	-0.568925	0.45876
Inflation Rate	0.45980	0.45876	5.48896	0.00018
Interest Rate	0.18672	0.24698	2.58965	0.005786
Cost of capital	0.35761	0.549865	-3.56892	0.038945
Equity capital	0.95786	0.56854	0.637996	0.04587
Debt Financing	0.68342	0.54987	0.78694	0.23568
Equity Financing	0.8697	-0.45983	0.635798	-0.00758
R-squared			0.875620	
Adjusted R-squared			0.236894	
F-statistic			124.5689	
Prob(F-statistic)			0.000086	
Durbin-Watson stat			0.231456	

Table 9: Malaysia: Regression Results of total debt ratio of MSEs (Sort term debt + ratio and long term debt ratio).

Variables of Capital	Coefficient	Std. Error	t-Statistic	Prob.
C	0.21536	0.325686	1.02568	0.0125
Asset Tangibility	0.45862	0.236986	1.356896	0.0014
Financial Flexibility	-0.25567	0.5468568	0.256896	0.2563
Liquidity	0.56584	0.24568	2.566845	0.4568
Profitability	-0.35698	0.365243	-4.568995	0.0045
Firm Size	0.56965	0.36876	-0.25689	0.0568
GDP Growth	0.256879	0.65789	0.45589	0.0058
Inflation Rate	-0.256548	0.256357	2.45876	0.4586
Interest Rate	0.36559	0.36524	0.45864	0.2530
Cost of capital	-0.365489	0.568756	3.45875	0.0056
Equity capital	-0.356854	0.35478	-2.36489	0.1452
Debt Financing	0.365248	0.364548	4.2525386	0.4568
Equity Financing	0.365245	0.25668	0.2356785	0.2305
R-squared		0.45870		
Adjusted R-squared		0.356891		
F-statistic		138.25368		
Prob(F-statistic)		0.0002356		
Durbin-Watson stat		0.452368		

Table 10: Singapore: Regression Results of total debt ratio of MSEs (Sort term debt ratio and long term debt ratio).

Variables of Capital	Coefficient	Std. Error	t-Statistic	Prob.
C	0.23568	0.54828	0.12458	0.25687
Asset Tangibility	0.14562	0.54621	0.68419	0.45786
Financial Flexibility	-0.23568	0.85698	0.598368	0.456879
Liquidity	0.12586	0.23675	-0.45896	0.002356
Profitability	-0.23569	0.45387	-0.15984	0.005689
Firm Size	-0.47859	0.42368	0.456789	0.52470
GDP Growth	1.23586	0.42589	0.546879	0.004785
Inflation Rate	0.4238	-0.45782	-0.546789	0.58697
Interest Rate	0.65984	-0.45278	0.1243576	-0.00785
Cost of capital	-0.57265	0.546879	-0.457855	0.053896
Equity capital	0.448984	0.754860	-1.25687	0.56784
Debt Financing	0.88654	-1.245978	0.455687	0.45683
Equity Financing	0.871664	0.5467897	0.354785	0.865790
R-squared		0.549847		
Adjusted R-squared		0.148165		
F-statistic		99.25892		
Prob(F-statistic)		0.000586		
Durbin-Watson stat		0.254834		

Table 11: Thailand: Regression Results of total debt ratio of MSEs (Sort term debt ratio and long term debt ratio).

Variables of Capital	Coefficient	Std. Error	t-Statistic	Prob.
C	0.2356	0.23563	0.56892	0.56987
Asset Tangibility	0.2466	1.23568	0.56897	-0.65896
Financial Flexibility	0.4587	0.36986	-0.23689	0.58976
Liquidity	0.45876	0.23578	0.65897	0.65789
Profitability	0.43589	-0.56897	0.13789	-0.68993
Firm Size	0.13547	0.23578	0.69750	0.45678
GDP Growth	0.9547	-0.35689	0.356898	-0.54978
Inflation Rate	0.35761	-0.36981	0.86975	-0.23568
Interest Rate	-0.458	-0.2356	0.46198	-1.53689
Cost of capital	-0.2568	1.36985	0.82656	0.48696
Equity capital	0.7859	-1.23465	0.45896	0.43685
Debt Financing	-0.5687	-0.5689	0.96885	0.87459
Equity Financing	0.23567	0.236986	0.23698	0.45896
R-squared		0.853689		
Adjusted R-squared		0.56866		
F-statistic		119.8657		
Prob(F-statistic)		0.000568		
Durbin-Watson stat		0.435689		

Table 12: Normality Tests for all variables of capital structure theories in selected Countries.

Selected Variable	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
GOP	0.235	85	0.000	0.190	85	0.000
ROI	0.452	85	0.002	0.235	85	0.420
ROE	0.056	85	0.000	0.146	85	0.006
EBIT	0.863	85	0.053	0.354	85	0.000
EBITDA	0.536	85	0.000	0.458	85	0.250
EPS	0.258	85	0.008	0.568	85	0.000
Size	0.963	85	0.023	0.391	85	0.056
Debt	0.147	85	0.452	0.276	85	0.000
Equity	0.567	85	0.000	0.168	85	0.000
LTDR	0.429	85	0.008	0.439	85	0.023
STDR	0.376	85	0.000	0.256	85	0.005
TDR	0.458	85	0.000	0.241	85	0.042

Table 13: Correlation between the variables with related to the capital structure theories.

	Leverage	Risk	ROE	GOP	SIZE	EPS	EBIT
Leverage	1.000						
Risk	0.235	1.000					
ROE	-0.423	0.568	1.000				
GOP	0.588	0.457	0.421	1.000			
SIZE	-0.356	0.256	0.364	0.537	1.000		
EPS	0.758	0.857	0.428	0.687	0.357	1.000	
EBIT	0.478	0.739	0.452	0.167	0.468	0.754	1.000

GREEN HRM: AN ORGANIZATIONAL COMMITMENT

Deepti Singh* Anu Pandey**

An integral part of changing business environment is the shift from profit motive to developing a business model that aims at profits through sustainability. Boardroom discussions are no longer aimed at financial bottom-lines, they rather are keener on building processes that meet the targets in a responsible manner specially giving due diligence in environmental and human perspective. Green HRM is step in the same direction, bridging the gap between managing the environment and managing the people of the organisation. This paper tries build a theoretical overview of green HRM and study the green HRM practices by some firms. A number of green initiatives right from the process of recruitment to each and every policy that HR departments of today's corporates lay down is a step in right direction. Adopting green HRM is found not only environment friendly but at the same time financially beneficial for the firm. Adopting Green HRM help business organizations to reduce carbon footprints of the employees by roping in initiatives like greater use of electronic resources, sharing resources, recycle, reuse, reduce policy. The paper looks on Green HRM as a strategic initiative by the corporate houses to promote sustainable business practices in addition to adopting environment friendly human resource practices.

Keywords: Green HRM, sustainability, Green HR practices.

Increasing environmental awareness and stricter regulatory regimes in areas related to environmental aspects of business is making green human resource practices a need of the hour. Creating a green workforce which understands, appreciates and implements green behaviour can take an organization a long way in achieving sustainable business objectives. HR departments of companies are capable in playing a significant role in materializing a sustainable employee behaviour. GHRM reflects a firm's orientation toward environmental protection and includes a series of specific HRM practices (Mishra, Sarkar and Kiranmai 2014).

I. Review of Literature

In many developed nations job applicants prefer to apply in firms which are environment friendly. In United Kingdom (U.K.) graduates seeking jobs are looking for environmental performance and reputation of a company as one of the important criterion for decision-making when applying for a job (Wehrmeyer, 1996; Oates, 1996; Clarke, 2006; Brockett, 2006). Similarly, the recruiters and employers too believe that being a green employer will improve their branding and will be useful in attracting good potential employees (CIPD, 2007; Phillips, 2007). It has also been suggested that being a Green employer increases motivation and engagement of its employees. It reduces labour turnover and improves the health of its employees (CIPD, 2007). Many firms are now using environmental performance standards. These standards are measured using several techniques like how

the company is managing and disposing its waste, how it is reducing wastage and ultimately whether the company is following environmental audits? Many Firms in the United States (U.S.) have developed green information systems and audits. This is helping them to gain insight into useful data on managerial environmental performance (Milliman and Clair, 1996; TUSDAC, 2005).

Companies are now using green HR in employee's performance appraisal (PA) as well. They are doing it by evaluating the employees on parameters like environmental incidents, usage of environmental responsibilities, and the communication of environmental concerns and policies (Wehrmeyer, 1996). There is a need to hold employees accountable so that they familiarize themselves with various environmental compliance issues (Milliman and Clair, 1996). It is also suggested that if environmental criteria are integrated into the process of staff appraisal then it will help in encouraging and creating a learning culture in EM (Rees, 1996). HR Training is being seen as an important mechanism to manage waste both in terms of prevention and reduction of waste (May and Flannery, 1995; Wehrmeyer, 1996; Milliman and Clair, 1996).

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II. Research Design & Methods

This paper gives a conceptual view of practices that are constituents of Green HRM in companies. While working on the paper, the authors performed a detailed study of available literature in the field of green HRM and in order to understand the practical application of the concept looked into the annual reports of some companies with a view to gauge reporting on the same. Apart from that discussions were held with HR managers of a few companies. Based on these, authors gave a framework of various areas and practices whereby green HRM have been and further can be adopted by companies. Each HR area is discussed with respective green initiatives in the following paragraphs. Thereafter, a few initiatives by some companies is also discussed.

III. Results & Analysis

Green human resource management or Green HRM refers to company's initiative to utilize each employee to support sustainable practices by increasing the awareness and commitment of employees towards sustainability. It seeks to engage in environment-friendly HR initiatives with an aim to attain higher efficiency and cost reduction along with increased employee engagement, which in turn helps to reduce carbon footprints of employees by employing initiatives that have higher degree of energy efficiency as well reduce emissions. It is a whole philosophy of increased sensitivity towards sustainable business practices and orienting, training and motivating employees towards the same. To add to this, it is imperative to make the organizational function of HR itself environment friendly. Various function where green HRM can be implemented are discussed below:

Green recruitment

Green recruitment brings focus of recruitment on identifying and attracting individuals with knowledge, skills, aptitude and interest that identify with the environmental management system of the organization. Attracting and hiring such employees makes it easier for the organization to align such employees with the organization's environmental culture. Such employees have a higher capability to uphold environmental values of the organization.

There can be a three-pronged approach for green recruitment including attracting employees with green awareness, branding your company as a green recruiter and selecting the candidates who are committed and sensitive towards environmental issues and are willing to contribute towards the organization's green goals.

The foundation of green recruitment is attracting candidates with green awareness, the candidates with higher consciousness and conscientiousness towards the environment will be more willing to engage in green activities of the firm. Employees who are of environmental value have been found to actively enhance their environmental knowledge in the operational process, which in turn enhances the environmental performance of their firms (e.g. del Brio, Fernandez and Junquera 2007).

Today's younger workforce has been taught the importance of environmental conservation since their elementary school levels leading to higher sensitivity towards environmental concerns. They have a higher interest in getting identified with organizations that have a reputation of being environmentally aligned. Tandberg (2007) studied that 80% of the existing employees want to work for a company with a good reputation for environmental responsibility. Many countries are having young environmental activists, even children like Greta Thunberg, when these kids grow up they surely would like to work with companies which are environmentally sensitive. If the company brands itself as a green company, the recruits also become enthusiastic and passionate about working for an environment friendly organization. Firms should therefore attract and select candidates with green awareness using a series of tests, to ensure that all employees are positive about environmental issues (Milkovich and Boudreau 2000). The environmental aspects of the job description as well as environmental expectations out of the employee shall be made clear in the recruitment process itself. Questions pertaining to environmental knowledge and awareness, ethos and beliefs can be included while evaluating the candidates. During shortlisting of candidates; employees' selection process should ensure selecting environmentally committed candidates who were involved in previous related green initiatives (Jabbour, 2011). Selecting candidates with a green attitude makes their induction easier as they are already aware of basics like recycling, environmental conservation, pollutants etc. this plays an important role in achieving environmental goals of the organization.

Another important aspect of green recruitment is making the process of recruitment itself environment friendly. In today's words organizations have a greater inclination towards using technology effectively in their recruitment process by providing an opportunity for candidates to search for and apply for jobs using their websites or online job portals, interviews are also held telephonically or through video calls like Skype, all the documents and testimonials are also accepted in soft copies rather than

physical copies. Such initiatives reduce the waste created in terms of usage of paper and unwanted travel during the process of recruitment.

Green training and development

Training and development deals with imparting necessary knowledge and skill to the employees so they can perform as expected in the organization to pursue organizational goals. Green training (GT) refers to a system of activities that motivate employees to learn environment protection skills and pay attention to environmental issues, which is key in accomplishing environmental objectives (Jabbour 2011). Green training and development aim to inculcate not only a green orientation in thought and action but also impart necessary understanding, proficiency, knowledge and mindset to function in a way that is aimed at better environment management. It is all about training the employees about ways of working that conserve energy, reduce waste and become more aware of the environmental impacts of their decisions. Training about effective waste management is playing a very important role nowadays. Green training and development is imperative for developing a culture of sustainable behavior by the organization, hence reducing their carbon footprints. Sometimes employees may themselves be interested in learning environmentally efficient ways of working and seek ways and means of conducting their duties in an environment friendly manner.

Green training and development educate employees about the value of EM, train them in working methods that conserve energy, reduce waste, diffuse environmental awareness within the organization, and provide opportunity to engage employees in environmental problem-solving (Zoogah, 2011). Green training enhances the employee's awareness in undertaking environment friendly activities at their workplace and get proactively involved in control and prevention of activities which are detrimental to the environment. The most important among them is identifying pollution sources as well as collecting data on waste so that steps can be taken to mitigate both. Through green knowledge management, employees can receive extensive green training, enhancing their knowledge of and skills in environmental protection and improving their abilities in dealing with complex environmental-management (EM) problems (Govindarajulu and Daily 2004). Another important aspect of green training is building a culture in the employees to become more involved and committed towards environmental initiatives. An environmentally sensitive organizational culture can prove to be a big milestone in reducing companies carbon footprints and

achieving its environmental goals. Apart from imparting training and development for sustainable business operations, the function of training and development has also been made green by way of electronic handbooks, video sessions, video conferencing to reduce the amount of paper and travel costs involved in the process of training and development itself.

Green performance appraisal

Performance appraisal is the periodic review of the employees' performance at job and his contribution to the organization. In addition to behavioral and technical competences, an employee's contribution towards green initiatives of the organization shall be included in the performance appraisal system. Arulrajah et al. (2015) explained that organizations can improve their efforts to protect the environment through integrating environmental tasks into the duties and responsibilities of each employee's job, or design environmentally concerned new jobs or positions in order to focus exclusively on Environment Management aspects of the organizations (Opatha, 2013). The environmental objectives of the organizations can be broken down into targets and action plans for all the members of staff. A series of criteria can be laid down in performance appraisal forms covering the employee's environmental responsibilities, contribution towards reduction in carbon footprints and participation in environment friendly activities. If, along with organizational performance, environmental performance is linked to rewards and compensation there will be a better chance of employees being motivated to adhere to their environmental objectives. Clear green targets and their indicators in performance appraisal system can encourage the accountability of employees towards environment management. A stricter approach of adopting penalties for employees who do not meet the green performance indicators or don't comply with the green goals can also serve the purpose of making the employees strive for green objectives in their future work. Inclusion of green roles in the job description itself makes the employees aware of green principles and organizational commitment towards the environment while applying for the jobs at the 1st place only makes the objective of achieving the goals easier.

Green Compensation

Compensation is a series of rewarding measures that are designed by the organization to attract, retain and motivate the most suitable employees. It often serves to encourage the right kind of knowledge, attitudes and behaviors of employees to complete organizational goals. Organisations' can link compensation and rewards to an

environmentally efficient behaviour. Rewards can be both monetary as well as non-monetary in nature. Getting linked rewards brings a sense of pride among employees and encourages eco-friendly behaviour. However, the challenge in this practice is difficulty in accurate and fair measurement of environmental behaviour of employees.

Some contemporary examples of Green HRM practices are as follows:

Bicycle leasing program: With the introduction of a company bicycle leasing program in June 2017, KARLSTORZ offered employees an attractive mobility option that actively contributes to health, to reducing traffic, and to protecting the environment. For this purpose, the company cooperates with a bicycle leasing company and thereby enables employees to conveniently finance their favorite bicycle (regular or e-bike up to 25 km/h) through lease payments. Instead of paying directly at the store, for a term of 36 months, part of the monthly gross salary is withheld as a so-called salary conversion to pay the leasing rate to the bicycle leasing company. The salary conversion reduces taxable income and social security contributions. Only the monetary advantage (1% of the gross list price of the bicycle) remains tax relevant. In total, employees can save up to 30% compared to purchasing the bicycle in cash.

Reduced Paper use: The transition from paper base workforce management system has reduced paper use in most organisations. Adani Ports claim in their annual report a saving of consumption of approx. 1 lack papers a month in Adani ports. Bharti Airtel is promoting recycling of used paper in Bharti's facilities. In FY 2017-18, 115 tons of paper was used, of which 11.1% was recycled through their partners and on a whole 12.7 Tons of paper was saved in offices. The conscious reduction in paper use and digitization of the attendance tracking and leave system reduced KARLSTORZ's internal paper use by around 61%. Other initiatives such as thermal printing for gate pass at Mundra Port and SMS-based gate pass for truck drivers, have been implemented to reduce paper consumption.

Waste management: In a drive to eliminate the use of plastics, the use of plastic commodities including polythene bags, water pouches, teacups and food parcel containers have been reduced and the use of alternatives such as cotton bags, increased by Adani ports. In past 5 years almost more than 10,000 tons of e-waste generated by Bharti was recycled. In addition, over 2900 tons of e-waste from IT and network infrastructure was responsibly recycled in 2017-18 through their authorized partners.

IV. Conclusion

Green initiatives in the area of HR is highly essential for companies to move towards attaining its sustainability goals. No efforts in the area can work in isolation from HR. Many companies are moving ahead in the adopting environment friendly practices in HR which in turn percolate to all the activities undertaken by such companies. However, it was found that the main problem in the area is measurability of the efforts as well as results. Some companies studied have only reported cost savings and waste management systems in the area. The impact of adopting green practices in HR is manifold ranging from employee motivation, reduction in carbon footprints, competitive advantage, employee retention, cost savings, manhours saving to name a few. Since reporting of green HRM practices is yet not mandated, there is no reporting framework in India for the same, making its measurability even more difficult. Most of the efforts are scattered and not considered a part HR function with bottom-line to be attained. However, the good news is that many organizations are realizing its importance and have started taking steps in the direction. More empirical work needs to be done in the area to look deeper into the environmental and financial impact analysis of the green HRM practices undertaken by organization.

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CREATIVE ACCOUNTING: AN INTERACTION OF HR AND ACCOUNTING

Renu* Nishant Sharma**

The technological changes in HR and Accounting has been astounding and has caused an unprecedented increase in activities related to creative accounting. Human resources in any organization has the incentive to be creative and therefore they indulge into ethical or unethical ways to achieve better results for the organisation. Present paper takes into consideration the ethical dilemma of one particular category of human resources in the organization, the auditors or accounting professionals. The issue of creative accounting emerges when auditors identify loopholes in the accounting standards and use these loopholes to further their own or directors' self-interest. And, therefore, the use of creative accounting may be seen as a potential threat to the corporate governance and organizational ethos. Irrespective of the fact that manipulation of accounts has resulted into many accounting and governance scandals in the past, use of creative accounting in preparation and presentation of financial statement is rampant. Thus, the objective of the present study is to identify the issues of creative accounting in the organizations and to analyse the extent and impact of role of internal and external auditors as crucial human resources of the organization in this context.

Keywords: Human Resources, Accounting Professionals, Auditors, Creative Accounting and Digitalization.

The technological changes in HR and Accounting has been astounding and has caused an unprecedented increase in activities related to creative accounting. Financial statements are constantly manipulated or white washed to reflect a brighter side of the company. These statements are indispensable mean to provide information regarding the performance and status of the company to various stakeholders like investors, employees, financial institutions and regulators etc. When directors or accountants indulge into creative accounting and distort reality such situation may mislead users of financial statement information. The question which often raised is: is creative accounting actually bad? Two significant human resources of the organization viz. directors and accountant indulge into ethical or unethical ways to achieve better results for the organisation. Creative accounting or use of creativity is also considered as an art to manipulate the accounts. However, such manipulation is not necessarily illegal but is unethical for sure. The accountant or directors try to find out the loopholes in accounting rules and use them to show the desired results. There are numerous areas in the business which may permit personal choices and judgements to be exercised by directors and accountants in making decisions. For example, the estimation of the useful life of an asset to calculate depreciation is done within the company and that provides a lot of opportunity to the accountant to use creative accounting practices to make judgments according to their own requirements. Accounting standards do provide a lot of opportunity for the creative accountants to

use unethical practices to manipulate the accounts. These practices have resulted into mammoth accounting scandals like Enron, Satyam and Kingfisher in past yet use of creative accounting is rampant in preparation and presentation of financial statements. The present study attempts to explore the issues of creative accounting and understanding its implication from the perspective of auditors.

Understanding Creative Accounting and Associated terms.

Creative accounting is known by different names such as earnings management, income smoothing, earnings smoothing, financial engineering and cosmetic accounting, big bath accounting and window dressing but all these terms describe the spirit of creative accounting. The term earning management is more popular in USA whereas the term creative accounting is more prominently used in European countries.

How we define creative accounting "A technique and a process used to portray a more favourable picture of financial statements capable of distorting the reality and

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misleading the users of financial information. It's a legit devil. Unethical yet legal. Undesirable yet employed. Discouraged yet promoted. It is like a recreational drug, harmful yet habitual.”

Accounting Standards

Creative accounting exists due to the flexibility in the accounting standards. Accounting Standards describe the rules and principles, to be followed in the preparation and presentation of financial statements. Standards are described as a framework whose main objective is to reduce the range of options, in order to improve comparability between various companies and between various accounting years. But we can see that various accounting methods are developed by companies by using their creativity because now the companies have the objective to provide flexible results rather than providing fair results.

Financial Statements

Financial statement is the result of the financial accounting process that involves the collection, analysis, classification, summarization, verification and interpretation of financial data of a business firm, which reflect the financial position, performance and conduct of an enterprise. These statements may include Balance Sheet, Profit and Loss Account, Cash Flow Statement, Statement of changes in equity and explanatory notes.

Reasons for indulging into creative accounting practices

Although various scandals have taken place in recent years due to manipulation of accounts (creative accounting), the companies are still using creative accounting practices in various areas such as in the preparation and presentation of financial statements, to get the financial statements audited etc. Here we try to highlight why creative accounting practices are being used by companies using various methods without violating the rules.

- **Income smoothing:** Companies generally prefer to report stable income rather than unstable results to the investors. This can be achieved by making unnecessary and high provisions for liabilities against value of assets in high income generating years and they can reduce these provisions in bad years to improve the reported profits. This will pass on a message to the shareholders that the company is running smooth and earnings are relative stable even in turbulent environment and it also effectively reduces corporate taxation.
- **To tie in to forecasts:** It is an important variant of income smoothing which is used by companies to

design the accounting policies and rules to match reported earnings to profit forecasts. So, by this method they can maintain the trends of income from year to year and they can predict the future earnings easily by using the past trends of income.

- **To distract attention from unsolicited news:** Companies use income-boosting accounting policy to distract attention from unsolicited news. By this method they can boost the profits by a particular figure to distract the attention of investors from unwelcome news like company is slipping back from being number one position to the number two position.
- **Maintain or boost the share price:** Companies use creative accounting practices to maintain or boost the share price. This is done by them by communicating to investors that the firm has higher earning power, which is likely to lead to a higher share price. This method makes the company to raise money from the new issue of shares and prevent the chances of takeover by other companies.
- **To get advantage of insider information:** Directors of a company who are involved in insider dealings instead of releasing the inside information for the public use it for their own benefits thereby they try to enhance their opportunity to get benefit from insider knowledge.
- **Conflict of interest among interested groups:** Conflict of interest among different interest groups is also an incentive for the companies to use creative accounting practices. For example, investor-shareholders want to get more capital gains and dividends, while employees want to get higher salary, bonus and profit share, managing shareholders' want to pay less taxes and dividends, tax authority of the country wants to collect more taxes. It is very difficult to satisfy all the groups at the same time that's why companies are compelled to use creative accounting practices to satisfy all the interested people.
- **Tax:** Tax burden is considered as an important motivator for the companies to manipulate the accounts. Large and high-profit making firms may have the incentive to manage their earnings downward to not to come in the eyes of regulators and thus less likely to pay higher taxes.
- **To get Government Assistance:** When a company has to face foreign competition, it may need help from the Government of its country and the government will need to make sure that the company is indeed struggling to survive in the market. Therefore, instead of moving up the profit, the company needs to lower its profit to strengthen the case of the company to get government assistance.

I. Review of Literature

Barnea et al. (1976) found that creative accounting involves the fluctuation about the earning of the firm which is considered to be normal. In short run it appears to be attractive, it might represent higher profits for the company but it will have long term implications which may lead to the collapse of the company. Merchant and Rockness (1994) also found that accounts manipulation is done on the part of management to affect the reported income and which does not provide any economic relevance to the organization whether in short run or long run in fact in the long run it will be difficult for the company to detect the manipulation finally it will have negative effect upon the company. Schipper (1989) observed that creative accounting involves the intervention in financial reporting. It involves the concealment of various facts and figures about the company which means that the company is not complying with the accounting standards and it is not giving true and fair view about the performance of the company. Jameson (1988) who has written from the perspective of an accountant argued that certain entries in accounting involves an unavoidable degree of estimation, judgement and prediction. Because of this they can select any approach for manipulation and misrepresentation of financial statements. This kind of practice will not reflect true and fair view of the company. Smith (1992) reported his experiences as an investment analyst and observed that the growth in profits which has taken place in 1980s in USA was not the genuine growth but was the result of use of creative accounting practices. He found the various techniques used by the companies like Enron and WorldCom at that time were income management, manipulation of expenses, off balance sheet financing, manipulation in valuation of stock and calculation of depreciation.

Naser (1993) tried to show that freedom in the choice of methods, regarding various accounting entries like valuation of stock, calculation of depreciation, allows the companies to tamper with the results by taking advantage of the rules. Shah (1998) observed that the companies who are able to successfully use creative accounting practices use them to distort the reality regarding the financial performance of the company to get unfair advantage. He said that the main aim of accounting regulations is to help the investors to take appropriate decisions whether to invest or not to invest in a particular company and the use of creative accounting practices by a company hampers the basic aim of accounting regulations and it also make it difficult for the users to compare different companies. Dilip (2006) conducted a research to find out the reasons for the sudden collapse of seventh largest company of

USA. He found that the company was hiding the losses using a complicated web of partnerships, subsidiaries and SPEs. Enron also used to issue stock options to its employees instead of incurring remuneration expenses and also used aggressive tax avoidance strategy. Robert (2002) suggested that the standard setters should revisit on standard setting rules in the accounting industry, policymakers should tighten up the enforcement of accounting standards by auditors to protect the interest of investors and improve the monitoring of accounting practices of both firms and their auditors to prevent the companies to use unethical practices. Amat and Gowthorpe (2004) highlighted that income management is a major technique which has been used by companies to manipulate the accounts which has no effect on the profits but it inflates the sales. Sales growth is an important indicator of the performance of the company to the investors but the use of income management misleads the investors about the performance of the company. Elliott et al. (2005) asserted that financial statements are the important mean for a business to reveal their performance to the various users who are related with the company. Trotman (1993) found that the business firms use creative accounting and filter the financial statements to display to the present and perspective investors in order to get a favourable image of the company.

Burlacu and Patroi (2005) concluded that companies alter their financial information through manipulation and present that to outside environment. Feleaga and Malciu (2002) stated that accounting professionals use their knowledge about loopholes in accounting standards to alter the financial statements according to the desire of company. Healy and Wahlen (1999) focused on managerial judgement as the main method to manipulate financial statements to mislead the stakeholders about the performance and status of the company in order to get commitment from them. Beidleman (1973) observed that income smoothing can have positive impact upon securities valuation for the analysts and it also helps to reduce the risk to some extent. Rees (1999) asserted that brand accounting is also a technique of creative accounting and with this method it is impossible to estimate the reliable value of brand which is also unstable. Trueman and Titman (1988) discussed that the managers of a company use creative accounting techniques to reduce the variability in the earnings of the company and to show stability in the income of the company. Kamin and Ronen (1978) observed that in management-controlled firm's managers try to manage the earnings to retain their control over the company but in owner controlled firm owner don't want to manipulate the earnings in order to prevent the intervention of government and other regulating

authorities. Botescu et al. (2008) found that creative accounting exists when company is not fulfilling its social responsibility towards its stakeholders which may lead to the collapse of companies as corporate social responsibility and long-term sustainability has a positive relationship.

State and Popescu (2008) concluded that accountants use their knowledge to manipulate the accounts which mislead the investors so in order to fulfil their social responsibility a company can make the use of accountants regarding various issues like transparency, ethics, morality, fulfilment of legal obligations in reporting of financial performance. Carnegie and Napier (2010) conducted a research to show that modern business environment has changed now companies are required to fulfil their social responsibility towards its stakeholders so accounts manipulation should be avoided if they don't want any kind of intervention from regulating authorities. Van Caneghem (2002) indicated in his study that small changes in financial figure can help a company to show significant change in the income which is also a method of creative accounting.

Amat and Blake (1996) conducted a research to highlight to attitude of auditors with respect to the use of creative accounting and concluded that use of creative accounting is unethical but legal. He also found that the problem of creative accounting can never be solved. Revsine (1991) written in defence of creative accounting. He has conducted a research on agency theory and positive accounting theory and highlighted that both managers and shareholders can benefit from 'loose' accounting standards. Managers can give desired results to attract the attention of shareholders to invest in the company and the shareholders can get an increase in their share in the profits.

Objectives

Creative accounting can be explained as the consequence of flexible use of accounting methods; it determines the credibility of accounting statements. Although it is within the law and the accounting standard, it is still widely believed that creative accounting undermines the problem of ethic in the financial field. The study has following objectives to address the issue of creative accounting.

- To highlight that creative accounting is unethical but it can be considered legal and can also be considered a positive aspect of accounting.
- To express the purpose and possible methods of Creative Accounting.
- To evaluate the prevention of creative accounting, the usefulness of Corporate Governance in regulating the

former and the usefulness of financial auditors from a subjective questionnaire.

Techniques of Creative Accounting

Auditors may be employing one or more of the following techniques in order to achieve cosmetically better-looking financial statements.

- **Income management:** This can include the early recognition of sales income or the reporting of sales transactions that have no real substance. A company whose is not performing well may overstate operating revenues by recognizing them to early
- **Manipulation of expenses:** Expenses is also a possible area where manipulation can be done by a company but it cannot be identified and examined in isolation of the balance sheet of the company. Manipulation of expenses can be done in any of the following manner:
 - **Deferring costs:** The most effective way of deferring costs to a later period is to carry them forward to the next accounting period as part of the company's closing stock. This will take some of the costs out of current year's accounts in turn increasing the closing stock, reducing the cost of sales for the current year and boosting the income and carry forward them to the next year. But the company has to be careful and does not put much pressure on the valuation of the closing stock of that year.
 - **Capitalization of expenses:** If the company wants to exclude costs completely rather than merely defer that cost then it has to look to the possibility of capitalization of the expenses. Another method is to disclose certain items below the line as extraordinary items. In this method (Capitalization of expenses) expenses appear as assets values in the balance sheet. This method was used by WorldCom for manipulating its accounts.
 - **Overvaluing assets:** In this method balance sheet values are inflated. Enron has used this method by predicting the future value of assets and by predicting future profits through mark-to-market accounting. A company can be appeared more prosperous than actually it is by aggressive estimations.
 - **Concealment of losses or liabilities:** Through reduction and concealment of losses or liabilities profit figures can be inflated. Concealment can be done through the creation of a separate entity to take over the losses or liabilities. Enron created special purpose entity (SPEs) to take over the losses and liabilities in order to improve the financial performance of the company.
 - **Tampering taxation:** Creative accounting techniques are also used to save tax. Tax rate determine the

earning per share and earning per share determine the price-earnings ratio. Company can increase the profit figures by reducing the tax bills therefore more profits can be attributed to the shareholders. For this purpose, the companies put salaries in profits, they put spouses in the books as employees who have never worked as employee of the company and reduce the amount of profits so as to reduce the tax liability.

- **Off balance-sheet financing:** Off balance-sheet financing is a method by which assets and liabilities are kept out of the balance sheet. In Off-balance sheet financing, money is raised but is not shown in the balance sheet. It means keeping the debt off the balance sheet that fake the financial structure of the company to the users of financial statements and to increase the credit worthiness of the company.
- **Inventory valuations:** The Organization uses three types of methods: (i) LIFO method (ii) FIFO method and (iii) average cost method. These are all the methods that any company can choose in order to show the desired results as all the accounting methods give different accounting figures. A company can use the number of strategies like, every year the companies manipulate their accounts by not recording the purchase invoices or by recording the fictitious transfers or by reducing the cost of sales
- **Extraordinary items:** Extraordinary items are those items which derived from the events or transactions which fall outside the ordinary activities of the company and which are both material and expected not to recur frequently or regularly. Creative presentation aims to transform dull figures and present accounts more attractive. By taking advantage of the vague rules, items can be easily classified as extraordinary instead of exceptional.
- **Acquiring Goodwill:** The acquisition of goodwill is also a favourite area of creative accountants. When a firm acquires another firm either in a takeover or an acquisition must incorporate the assets acquired in the consolidated accounts at 'fair value'. Any remaining difference between cost of acquisition and 'fair value' is classified as goodwill. This goodwill figure can be written off against reserves immediately. Writing off goodwill against reserves, gives the opportunity to benefit from an immediate improvement in reported profits. The net result is an increase in profits.
- **Depreciation Policy changing:** Changes in depreciation methods and policies have been a favourite method of manipulating the accounts. Management has the discretion over the depreciation methods to choose from the range of different depreciation methods. Management select appropriate method as per the assets concerned and use that

method as fairly as possible in the periods expected to benefit from the assets' use. A company is allowed to change the depreciation method only if the new method is expected to represent the financial position and the company's results in a better way. But the change of method cannot be considered as a change of accounting policy. A company can change the profit figures simply by changing the life of an asset over which the method is applied.

- **Brand accounting:** Companies which have significant brand accounting assets in their balance sheet can use that opportunity to manipulate accounting information. The assets which have high reputation and brand in the market which attracts the investors, companies include them in their balance sheet. The main attraction of brand accounting is that; it is impossible to determine reliable value of the brand. In addition, the brand value is unstable which may be eliminated overnight.

II. Research Design & Methods

To research the area of the notion of creative accounting, and to better evaluate the effects, incentives and other corresponding fields involved in creative accounting, qualitative research method in form of online questionnaire and the questionnaire-based interview has been employed in this study. We used this type of survey methods because we wanted to ensure the ability to observe those phenomena in a natural setting and we wanted the respondents to be more honest in their responses because of the anonymous nature. The study is based on data collected from both primary as well as secondary sources. A questionnaire was administered with the target group as internal and external auditors of the company to gauge the gravity of the problem. The results were analyzed with the help of statistical package SPSS. In the questionnaire Likert five-point scaling method has been used to get the responses of the respondents. A significance level of 5% was considered everywhere to maintain the uniformity in reporting of the results.

In order to address the research objectives following hypothesis were developed and tested:

H₀₁: There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is unethical.

H₀₂: There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting exists due to lack of corporate governance on the part of company.

H₀₃: There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is legal.

H₀₄: There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that Creative accounting can be diminished by corporate governance.

III. Result & Analysis

We present a synopsis of the hypothesis for the sake of convenience and understand ability as below:

Hypothesis No.	Description	Remarks
H ₀₁	There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is unethical.	Do Not Reject
H ₀₂	There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting exists due to lack of corporate governance on the part of company.	Do Not Reject
H ₀₃	There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is legal.	Do Not Reject
H ₀₄	There is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that Creative accounting can be diminished by corporate governance.	Do Not Reject

Result H₀₁ (Refer Table 1): The column labeled Levene's test for equality of variances tell us whether an assumption of the t-test has been met. The t-test assumes that the variability of each group is equal. For this we look at the column labeled 'sig' under the heading levene's test for equality of variances. Here Sig(p-value) i.e 0.446 is greater than 0.05 so we accept the null hypothesis that the variability of the two groups is equal and we use the middle row of output that is labeled equal variances assumed.

The column labeled 't' gives the observed or calculated value, df gives the degrees of freedom associated with the t-test. Here degrees of freedom are 108. 'Sig' gives the two

tailed p value associated with the test. For t-test we compare p value with 0.05. Here $p(.255) > 0.05$.

Conclusion: It means that the probability of getting 1.145 (ignore signs for two tailed test) or greater than 1.145 is high so we do not reject the null hypothesis and we can conclude that there is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is unethical.

Result H₀₂ (Refer Table 2): Here Sig(p-value) i.e 0.634 is greater than 0.05 so we accept the null hypothesis that the variability of the two groups is equal and we use the middle row of output that is labeled equal variances assumed. Sig gives the two tailed p value associated with the test. For t-test we compare p value with 0.05. here $p(.511) > 0.05$

Conclusion: It means that the probability of getting 0.659 (ignore signs for two tailed test) or greater than 0.659 is high so we do not reject the null hypothesis and we can conclude that there is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting exists due to lack of corporate governance on the part of company.

Result H₀₃ (Refer Table 3): Here Sig(p-value) i.e 0.778 is greater than 0.05 so we accept the null hypothesis that the variability of the two groups is equal and we use the middle row of output that is labeled equal variances assumed. For t-test we compare p value with 0.05. Here p value i.e 0.239 is greater than 0.05.

Conclusion: It means that the probability of getting 1.184 (ignore signs for two tailed test) or greater than 1.184 is high so we do not reject the null hypothesis and we can conclude that there is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting is legal.

Result H₀₄ (Refer Table 4): Here Sig(p-value) i.e 0.832 is greater than 0.05 so we accept the null hypothesis that the variability of the two groups is equal and we use the middle row of output that is labeled equal variances assumed. For t-test we compare p value with 0.05. Here p value i.e 0.091 is greater than 0.05.

Conclusion: So we conclude that the probability of getting 1.704 (ignore signs for two tailed test) or greater than 1.704 is high so we do not reject the null hypothesis and we can conclude that there is no significant difference between the opinion of Auditors and Practicing CAs' with regard to the statement that creative accounting can be diminished by corporate governance.

IV. Conclusion

The issue of creative accounting attracts more and more attention in the whole financial market. The presence of creative accounting distorts the true and fair view of the financial position of companies but they are perfectly legal. Over the past few years, most East Asia economics have been actively reviewing and improving their regulatory frameworks regarding corporate governance, financial reporting and disclosures. The west countries' recent economic chaos has led to a wider recognition of the important of corporate transparency and financial disclosures. Companies use manipulative techniques in accounting practices to show steady trend in profits, to maintain or boost the share prices, to match reported earnings with the forecasted earnings, to distract attention from unwelcome news and to satisfy the various stakeholders. But it distorts the reality and does not give true and fair view about the financial performance of the company. So creative accounting is unethical which leads to a diversion from ethical accounting. In short run it appears to be attractive and beneficial but it has long term implications such as the confidence of investors reduces from the financial market, they may feel that no company is safe for investment. In long run these practices are hard to detect which finally lead to the collapse of the company which is using creative accounting practices. As new accounting methods are emerging creative accounting seems to be a continuous process. So huge work is required to develop and implement stronger and more effective corporate structure, to ensure independence of members of board of directors, to increase the transparency of audits and reports. Also, control mechanism should be developed to govern the human resources viz. the Internal and External Auditors of the company.

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Figure 1: Reasons of using creative accounting practices.

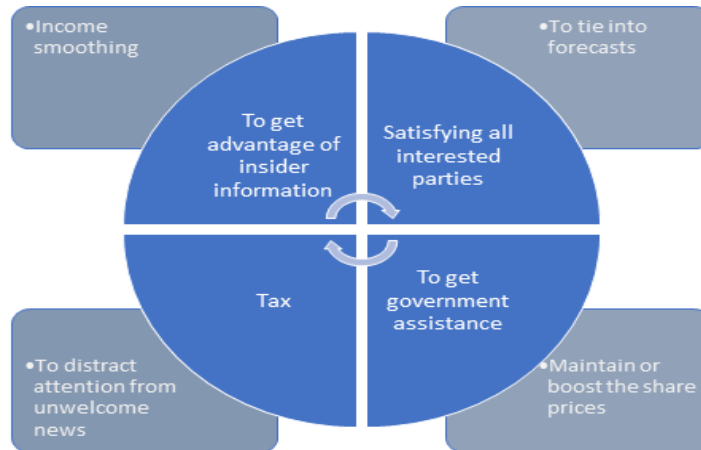


Table 1: Independent sample t-test for hypothesis 1.

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Creative accounting is unethical?	Equal variances assumed	.585	.446	-1.145	108	.255	-.844	.737	-2.304	.617
	Equal variances not assumed			-1.203	64.263	.234	-.844	.701	-2.245	.558

Table 2: Independent sample t-test for hypothesis 2.

	Levene's Test for Equality of Variances			t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
creative accounting exists due to lack of corporate governance on the part of company.	Equal variances assumed	.228	.634	-.659	108	.511	-.082	.125	-.329	.165
	Equal variances not assumed			-.659	106.532	.511	-.082	.125	-.330	.165

Table 3: Independent sample t-test for hypothesis 3.

	Levene's Test for Equality of Variances			t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Creative accounting is legal	Equal variances assumed	.080	.778	-1.184	108	.239	-.192	.162	-.514	.130
	Equal variances not assumed			-1.186	107.134	.238	-.192	.162	-.514	.129

Table 4: Independent sample t-test for hypothesis 4.

	Levene's Test for Equality of Variances			t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Creative accounting can be diminished by corporate governance	Equal variances assumed	.045	.832	1.704	108	.091	.262	.154	-.043	.567
	Equal variances not assumed			1.696	103.993	.093	.262	.154	-.044	.568

PITFALLS OF DIGITIZATION WITH RESPECT TO TRADITIONAL BUSINESSES AND EMPLOYMENT

Guneesha Kohli*

From Artificial Intelligence (AI) to E-commerce, Digitization has created possibilities in the business world for companies, entrepreneurs and self-employed workers, for new opportunities and innovation. It has enabled companies to bring perfect products and services reaching larger and remote markets making customers happy by enhancing their daily life. It has enabled remote working which has made free-lancing popular and preferable and made both internal and external communication instant, making action and reaction to opportunities and problems much faster. While there is no end to the benefits of digitization, it also has some pitfalls which need to be worked upon to benefit from it sustainably. E-commerce and deep discounting done by platforms like Amazon and Flipkart have left competing small traditional businesses and retail giants bankrupt and out of business. According to the Geneva-based World Economic Forum (WEF), by 2025 more than half of all current workplace tasks will be taken over by robots as compared to 29% currently. While experts say, that AI will be creating much more jobs than it takes, the key to this is education for humans to overtake technology. This overlooks the rural workforce such as women working in farmlands losing their jobs due to modern machinery, who have limited or no access to high quality education and will take a very long time to catch up with technology to get employed. In this paper, we will be looking at the extent to which digitization has affected traditional businesses and employment opportunities and what is being done to cope with it.

Keywords: Digitization, Retail Apocalypse, E-commerce, Deep Discounting, Artificial Intelligence, Unemployment

Digitization is a broad and ambiguous term having many meanings. In technical terms, it means converting information from analog or text form to digital format by converting paper documents to digital form. While some refer to it as restructuring of social life and the way people interact around digital communication and media platforms. In business terms, it is the process of moving to a digital business by using technology to change a business model and operations creating new revenue and value producing opportunities. From E-commerce to e-banking, electric and driverless vehicles to GPS, physical documents, cassettes and tapes to pdfs, videos and images, Digitization has affected every aspect of our daily lives and businesses.

Benefits of Digitization in Businesses

Digital Presence of a company through social media platforms and e-commerce not only increases sales channels for a company but also helps it penetrate new markets creating a borderless world for consumers and sellers. It reduces dependence on physical sales channels like retail/office space, infrastructure and permanent employees considerably reducing the investment. This lowers both entry and exit barriers for entrepreneurs to start businesses and pass on this cost benefit to consumers giving them a competitive advantage. It makes a company closer to its customers making it possible to know their preferences and feedback.

Data collection and management provides significant valuable knowledge for companies which they can use to make products more relevant to customers, filling gaps in the markets. Data analysis is used by Modern businesses for better and sound decision making related to each aspect of business (sales, marketing, employee productivity etc.). Constant update in technology leads to Innovation in making new and better products and also processes of doing work. Artificial Intelligence, Robots and Automation through new machinery have made many tasks cheaper, easier, faster and seamless involving lesser or no human effort. Technology makes remote-working, flexible hours possible making free-lancing and talent retention for companies and executives lucrative. Both internal and external communication between members of teams and customers and suppliers sitting in different countries has become instant and at minimal cost increasing efficiency, productivity, sales, and customer experience.

Pitfalls of Digitization

Digitization is happening at a such a rapid rate that many companies' CEO's underestimate how fast it is affecting all aspects of their business including their product,

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operations and consumers and are not able to cope up due to the sheer magnitude and momentum. According to a survey conducted by McKinsey, only 8% of the companies say that their current business model will be economically viable in the next ten years if their industry keeps digitizing at its current rate. Digital is driving ‘Winner takes all’ economics meaning with scale and network effects, certain companies are becoming unbeatable market leaders and profit is concentrated with just one or two companies whereas in traditional businesses, profit pool was divided between many more participants. For example, Amazon has much more market share than other retailers. Similarly, Iphone captures approx. 90% of the smartphone industry profit.

I. Review of Literature

This paper has been written by firstly identifying the trend of jobs being lost and changes in nature of workforce caused due to digitization in newspapers and industry reports, specifically the jobs lost due to the Retail Apocalypse and increasing use of AI in every field. Further analysis was done by looking at and comparing the conclusions of reports of World Economic Forum and McKinsey Global Institute on jobs lost due to AI and Report by UBS Securities on the retail stores closed in the past decade due to e-commerce and its further effect in the coming years. In this paper, Digitization has been explained as a phenomenon and how it has benefited mankind and human behavior for the better and its limitations in the current scenario. Retail Apocalypse as a phenomenon has been explained and how it has affected jobs and small businesses has been studied in detail. What is being done by retail giants and small businesses to deal with this change in consumer buying behavior and preferences and how they have been forced to change their business models has been analyzed. It looks at how workforce that has lost their jobs has to change and update their skills and look for jobs elsewhere studying in detail how it has affected different communities in a different manner. For eg, women have been mainly holding front-line roles such as sales helpers and handling cash registers have lost more jobs due to store closures as compared to men who now have access to more back-end better-paying jobs like working in warehouses and delivering products due to boom in e-commerce.

Artificial Intelligence and concerns related to it have been looked at in detail particularly studying how it will lead to creation of almost double the amount of jobs it takes and how it is affecting agricultural and industrial economies with low-skilled workforce adversely as compared to services based economies. How marginalized

communities’ employment and welfare is being crushed by automation as they do not have the resources to update their skills to benefit from better paid and more productive jobs created by AI has been identified. What training and education do future generations need to concentrate to acquire jobs created through AI has been studied.

II. Research Design & Methods

While there are countless advantages of digitization and many pitfalls due to its pace and magnitude of disruption, in this paper we will be studying Unemployment and closure of traditional businesses caused by Artificial intelligence (AI) and a phenomenon called ‘Retail Apocalypse’. Due to the practical and current nature of this topic, through secondary research such as reports by experts and news articles, we will be looking in detail at the causes as to why traditional businesses and retail giants are not able to cope up with their digital competition and possible solutions to it. We will study what mankind needs to do to catch-up and out-do Artificial Intelligence and benefit from it sustainably.

III. Results & Analysis

Retail Apocalypse and obsolescence of traditional small businesses: Meaning, causes and solutions

Retail Apocalypse is referred to the devastating effect that has led to the closure of countless department stores and shopping malls in the US in the last decade which is also feared to happen in other countries. Factors that led to this are the financial crisis of 2008, followed by the strategy of private equity firms to load struggling retail companies with massive debt burdens and the simultaneous meteoric rise of e-commerce. Past decade proved to be a deadly one for retail giants. As per Business Insider, as many as 9300 stores were closed in 2019 and a total of 1.3 million jobs have been lost in the last decade and an additional 728,000 indirect workers lost their jobs due to cuts made by suppliers of retailers that went out of business. Closure of major department stores causes a death spiral as smaller stores/businesses like nail spas, small jewelry stores and coffee shops which benefitted from the foot fall generated by the big store are also adversely affected. Women who mainly held front line jobs like sales helpers or worked at cash registers have been the worst affected as compared to men for whom jobs are still created due to shift from retail to online as they are involved in warehouse jobs and delivery roles. And it is not over yet, almost every day a major Retail name is filing for bankruptcy and shutting their stores across the World. Since this is a continuous phenomenon, every other day a

new name is added to the list of closed retail giants but below is a short list to name a few.

List of some Retail players closed in the last decade and expected to close in 2020.

1. Toys R Us-735 stores
2. Payless Shoesource-2500 stores
3. Gymboree-805 stores
4. Shopko-251 stores
5. Gap-230 stores
6. Performance bicycle-102 stores
7. Charlotte Russe-94 stores
8. Sears-70 stores
9. Destination Maternity-42-67 stores
10. Victoria's Secret-53 stores
11. Kmart-50 stores
12. Christopher & Banks-30-40 stores
13. JCPenney-27 stores
14. Henri Bendel-23 stores
15. Beauty brands-25 stores
16. Lowe's-20 stores
17. Macy's-9 stores shut in 2019, 30 more to be shut in 2020
18. J.Crew- 7 stores
19. Kohl's-4 stores
20. Nordstrom-3 stores
21. Pier 1 Imports- 450 stores
22. Bed Bath & Beyond-14 stores in 2019, 60 stores to be shut in 2020.
23. The Children's Place-144 stores to be shut in 2020.
24. Destination Maternity-183 stores to be shut in 2020.
25. Forever 21- 178 stores to be shut in 2020.
26. Sear Optical- 200 stores
27. Walgreens-200 stores
28. Chico's-200 stores
29. Gap Inc-230 stores

(Source: Business Insider, Pennlive.com)

Retail giants and traditional small businesses not able to cope with Digitization due to the following reason:

Preference of shoppers for convenience of ordering online anytime, anywhere as compared to going to a store in opening hours only. Benefits like free delivery and return, limitless choice and deep discounting in mega sales held by e-tailers has revolutionized the world of consumers by putting them in the center of the value universe. Small business owners do not have such deep pockets that they can match the pricing offered by e-tailers. Rise of business to consumer (B2C) companies has rendered distribution network, wholesalers and retailers irrelevant and obsolete. More and more (big or small) brands which

initially depended on using the distribution channel of wholesalers have now built their own web sales platforms like website and mobile apps to reach the consumers directly. High investment in building a digital sales network and innovation, competing with discounts offered by e-players while maintaining the costs of real estate and sales force has rendered retail giants bankrupt. This is also a big hurdle for small businesses' who cannot establish their digital presence as fast as big e-tailers as they lack the money and expertise while e-tailers keep leaping forward with their network and scale. Using the scale and network, digital players accumulate data about consumer behavior and preferences that help them tailor and improve their product and service offerings providing the customer maximum value while benefitting themselves from higher sales and profits. This makes it even harder for retail giants to offer any unique value propositions. One of the biggest driving forces and competitive advantage of the e-commerce industry is 'Deep-Discounting' or 'Predatory pricing'. Many small traders associations have filed complaints against this practice of e-tailers offering unrealistic discounts during mega-sales highlighting that these discounts are sponsored by the e-tailers themselves due to their deep pockets. While e-tailers say that these discounts are offered by sellers on the website and not them, the traders associations say that during festive season, mega-sales are advertised under the e-tailers brand name and not the selling brands name.

The Government has drafted a set of Consumer (e-commerce) protection rules under the Consumer protection act which prohibits the e-tailers from directly or indirectly affecting the pricing of the products or services offered or indulge in any practice that affects the decision making of the consumers. The policy puts a limit on the maximum discount offered on a product and also makes sure that the seller is offering it. Under the policy, the platforms will have to submit detailed break-ups of the discounts on the pricing offered, to make sure that they are not the ones financing it. A big problem with e-tailing is that consumers are often misled with false details and reviews about products on the website which influence their buying decisions and then delivered a product which is not up their expectations plus returns procedures are made tedious and discouraging. The draft rules underline that the e-tailers are not allowed to pose themselves as consumers and users and post false reviews about their products exaggeration about the quality or the services. The rules prohibit unfair advertising by e-tailers and ensure that advertisements are consistent with the actual characteristics of the product. They have to accept and process returns within 14 days of delivery of any

products that are delivered after the promised delivery date or are not consistent with their characteristics mentioned on the website. The guidelines state that e-tailers will have to publish name and contact details of their grievance officers who can be contacted by email or phone to register consumer complaints and will have to provide a tracking number for each complaint. These draft rules will most likely be finalized in the year 2020 and will be instrumental in providing some relief to traditional business owners from predatory pricing. These rules will give maximum rights to the consumers and ensure they are not taken for a ride.

Artificial Intelligence and its effect on Employment

Artificial Intelligence is defined as ‘the simulation of human intelligence into machines that are programmed to think like humans and mimic their actions.’ It is the ability of machines to rationalize and take actions that have the best chance of achieving a goal. The goals of AI include learning, reasoning, perception and problem-solving to execute all kinds of tasks, from simple ones to more complex. Constant innovation is being done in AI and it is continuously evolving by wiring machines using a multi-disciplinary approach based in mathematics, computer science, linguistics, psychology and more.

AI has endless applications in almost every industry, from healthcare where it’s being tested for dosing drugs and treatments in patients and performing surgeries to chess-playing computers and self-driving cars. It is being applied in banking and finance industry to identify unusual debit/credit card activity and detect frauds and streamlining and making trading easier by making supply, demand and pricing of securities easier to estimate. Each of these machines must analyze all the external data and weigh the consequences of any action they take as each will impact the end result. Machines with AI reduce human-errors in important tasks such as weather and natural disaster prediction; do risky jobs such as space exploration and bomb diffusal instead of humans. They can do boring-repetitive jobs and can work without getting tired unlike humans. They can collect and process information faster to make important decisions instantly. Despite its attractiveness due to its endless applications and benefits, AI has always come under scrutiny of both scientist and public regarding some special considerations, some of which are listed below.

Concerns related to AI

One common fear is that the machines will become so highly-developed and powerful that they will be able to redesign themselves at an exponential rate and humans will not be able to keep-up with them. The most extreme

scenario being that machines will one day enslave humanity. With AI, machines can hack into people’s privacy and can be weaponized. A common allegation nowadays that people’s systems are being hacked for military intelligence, political agendas and propaganda. Artificially intelligent machines are complex and are very costly to make and maintain due to highly qualified manpower required to design it and constant software and hardware updation required to make them function correctly. Currently machines lack emotions which are required for human bonding and team building and management. They are also not able to think ‘out-of-the-box’ and cannot solve problems or deal with situations they are not programmed for. However, with further innovation, scientists are trying to make machines more emotionally intelligent and as human-like as possible. The most common concern that people have with AI is that more and more industries are mechanizing maximum tasks by replacing human jobs with machines making human skills redundant. This is feared to cause widespread unemployment until humans educate themselves and update their skills to a certain level that they can overtake machines or find alternate jobs. This is especially true for low skill rural jobs like ladies working in agricultural fields who do not have many avenues such as re-location or resources such as schools or money to update their knowledge or acquire alternate skills to find employment elsewhere.

Effect of AI on employment

Geneva-based World Economic forum (WEF) after surveying a set of companies representing 15 million workers, projects that Robots could take over 52% of the current work load in less than a decade as compared to 29% today. The think tank warns that machines could displace 75 million from their jobs as early as 2022 triggering a ‘Fourth Industrial Revolution’. The report by the think tank also says that automation will create twice as more jobs as it will displace and could create 133 million more jobs for humans to handle as compared to the 75 million jobs it takes. The jobs created will be more adaptive to the new division of labour between humans, machines and algorithms. But a direr survey of 46 countries covering 800 different work environments conducted by McKinsey Global Institute found that number of jobs lost due to automation will hit one billion mark by 2030. The report said that up to one fifth of the world’s total workforce will feel the effects of automation. Machine operators, food industry workers and transportation related workers like taxi drivers will be hit the hardest over the next 12 years. While this report concludes that new jobs will be created by AI, nations depending mostly on agricultural and industrial jobs will

have to invest heavily in the skill development and education of work force to cope with it. Experts suggest that the key to survive AI is education in order to be able to fill-up the jobs created by Robots. The result of the race between technology and education will depend on whether opportunities created by major innovations are seized and whether the benefits of progress are widely shared.

Dr. Restepo, an economist from Boston University says that automation has been affecting human jobs since over last 200 years and that humans have managed to shift their skill set to cope with it. He said that automation of agricultural sector pushes workers to Industrial sector and then further to the service sector when the industrial sector is also heavily mechanized. This view ignores the rate at which AI is now taking over tasks is much more rapid as compared to 30 years back and economies need some time to invest in their workforce and shift their skills for jobs created by AI. A growing number of detractors including Elon Musk highlight that AI will disrupt marginalized communities and low-skilled workers who do not have the resources to update their skills according to jobs created by AI. Certain industries like IT and customer facing roles can be optimistic about job creation and are likely to benefit more with digitization as compared to others. Data Analysts and specialized representatives to commercialize digital products are likely to face maximum demand across all industries and countries, as companies will need people to analyze the huge amount of data accumulated by digitization to point out future trends and sell the new updated versions of digital products. In short term, looking at the impact of digitization on their industries, most employers are working towards training and up-skilling their people and also increasing their headcount to adjust with automation to prevent the present employees and business model from becoming redundant. A new report from McKinsey Global Institute says that women are at a great risk of losing their jobs due to automation and estimates that up to 12 million women will lose their jobs due to automation. McKinsey noted that in Agricultural economies like India where agriculture accounts for over 60% of the female working population, Automation in the subsistence agriculture category could account for 28% jobs lost by women as compared to 16% jobs lost by men. 4 million women in agriculture, fisheries and forestry, 3 million in craft related work and 2 million in elementary jobs could risk their employment. More jobs are estimated to be created in healthcare, construction and manufacturing sector as opposed to agriculture. A shifting job landscape will require women to acquire new skill sets and take – up

‘transitioning jobs’ from farm to non-farm occupations demanding higher skilled roles. This will require them to be mobile and tech-savvy. Oxfam in their report ‘Mind the gap-state of employment in India’ face pervasive barriers and will need targeted support to move forward in the world of work. While women will have access to more productive and better-paid work by acquiring ‘transitioning skills’, if they cannot, women will be facing a growing wage gap and left further behind when the progress towards gender parity in work is already slow. However, it is not all downhill for human employment. With automation, the demand for work and workers will increase with the growth of economies due to increase in productivity enabled by technological progress. Rising demand for healthcare in aging societies, investment in infrastructure and energy in emerging economies will create demand for work that will offset the displacement of workers.

IV. Conclusion

Effect of **Retail Apocalypse on employment and small businesses**

Although the Govt. is laying out strict rules for e-commerce platforms for ‘deep-discounting’ to prevent small businesses from getting wiped out. However, price competition is only one aspect of digitization that retail giants and small businesses are facing. The convenience of online purchase and returns and the perfect wide array of products being offered by e-tailors due to the data they accumulate about consumer behavior is seriously hitting the traditional businesses hard. Same is the case with consumers, the competitive pricing, variety and convenience is making online buying preferable than physical buying even though there is a chance of being delivered a product much below expectations. The retail giants and small businesses really need to up their digital game at every level very fast as the incumbents in e-commerce industry are benefitting and growing faster with the more consumers they gather due to network effect. However, sooner or later the retail industry is completely going to be revolutionized wherein brick and mortar stores will be completely forgotten being a thing of the past. The workforce working at retail stores will have to look for other jobs same goes with the small businesses owners involved in retail.

Effect of AI on workforce:

Automation has always been a deterrent but is now a bigger threat than ever to human employment due to the fast pace and scale at which innovation is happening in fields of robotics and AI. Companies and Governments are excited about benefitting from digitization and are

positive that it will create more jobs than it displaces. They also recognize the danger it poses to workers around the globe, especially economies that rely heavily on manual labour in agriculture, manufacturing and services. In short term, Govt's and companies' efforts to upskill their work force will not cause decline in headcount and might even increase it. In Long term humans will have to highly educate themselves to be able to be fit for jobs created by automation as the nature of jobs and workforce scenario will completely change due to the dynamics between machines, humans and algorithms. Workers will have to radically change their nature of work and acquire secondary education to gain access to jobs that pay better. While it is almost certain that AI will eventually create more and better-paying jobs than it displaces, there is also no doubt that that it will soon disrupt low-skilled worker communities and make them redundant. In India, this will mainly be true for agricultural workers who will have to change their nature of jobs to construction, healthcare and manufacturing and aspire to move into high-skilled roles. It is also clear that AI will affect jobs in different industries in different ways.

Agriculture and Transportation are set to face major disruption in human employment whereas a huge demand is being created for Data analysts and sales representatives for digital products. In order to benefit from AI sustainably, humans need to recognize the changes in job dynamics and work towards giving future generations' relevant skills and education to be able to fit in jobs for the future.

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A BEHAVIORAL ANALYSIS OF THE GOLD INVESTORS IN INDIA WITH SPECIAL REFERENCE TO KERALA

Mallika Mathew* M. M. Sulphey**

This paper investigates the behavior of the capital market investors in Kerala towards gold investment. It also examines the perception of the Gold Exchange Traded Funds as a gold investment option among the capital market investors in Kerala. A structured questionnaire was used for collecting data from the Keralities who are demat account holders and invest in the capital market. Factor analysis was used to identify the factors which influence the perception of the investors towards Gold Exchange Traded Funds. Discriminant analysis was used to identify the factors influencing the investment in Gold Exchange Traded Fund. This is the only study, which has been conducted to study about the perception of the capital market investors in Kerala towards Gold Exchange Traded Funds as an investment option in gold.

Keywords: Gold Exchange Traded Funds, Capital market investors, Gold investment

Exchange Traded Fund (ETF) has opened up a whole new world of investment opportunities to both retail as well as institutional investors. ETFs are considered as a tool which allows smaller investors to enter the market which otherwise they could not, as the costs of direct entry are sometimes too high. An ETF, or Exchange traded fund, is a security that tracks an index, a commodity, bonds, or a basket of assets like an index fund. It is traded like a share on a stock exchange. The price of ETFs changes throughout the trading hours of the day as they are continuously bought and sold. The creators of ETFs pool the investments of numerous investors. The ETF breaks down the product they have invested in, into shares and sells them in a secondary market. Unlike the conventional mutual funds, ETFs can be traded on the stock exchange throughout the trading day. Investors prefer this because of its diversification features, low management fees, tax efficiency and transparency. S&P 500 depositary receipts, also known as SPDRs ("spiders") was the first ETF, which was created by State Street Global advisors in 1993. Initially the ETFs tended to track broad market indexes, but later on it started tracking commodities, currencies, fixed income, sectors etc. India's ETF journey started with the launching of Nifty Bees by Benchmark Asset Management Company in December, 2001. Gold ETF is the electronic form of purchasing gold. It is an innovative instrument which is backed by physical gold and is traded in the stock exchange like a share. An investor can invest in gold without taking physical delivery of it by investing in Gold ETF. The creation of Gold ETF has enabled investors to purchase gold with the convenience of trading as an equity share on the stock exchange while also increasing the pool of investors who

buy gold from the market (O'Connell, 2007). The first Gold ETF was launched in the world by the name of Gold Bullion Securities, on 28 March, 2003 in Australia. In March 8, 2007, Benchmark Asset Management Company launched Gold Benchmark Exchange Traded Scheme (Gold BeES), the first Gold ETF in India. As of December, 2019, there are 61 ETFs in India of which 13 are in Gold Category and the balance in other categories.

I. Review of Literature

The popularity of ETFs has been soaring in the past decade due to the numerous advantages it offers to the investors. Gold ETF is one of the most convenient ways of investing in Gold. As per the study conducted by Paluri & Mehra (2016) in India, the financial attitude of an investor has linkage with anxiety, awareness of financial matters, precautionary saving, free spending, money-oriented attitude, predisposition to plan for short term and long-term goals. Several studies have been conducted on the investment behavior of investors. In a study conducted in India, Chandra and Sharma (2010) concluded that cognitive errors such as excess sensitivity to rumors, conservatism bias and representativeness bias affected the investors' behavior in the Indian stock market.

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Pumpinyo (2003) on examining the gold investment behaviour of industrial factory workers in Thailand found that gold was purchased mainly for using it as an ornament and also as a form of saving. The same conclusion was arrived at in studies conducted by Hiranyasiri (2005) and Panyapikrau (2005), where it was seen that although majority of the investors save and invest in gold. In the study conducted by Napompech, Tanpipat, & Ueatrakunkamol(2010), it was found that the majority of the respondents invested in gold less than once a year. An analysis by Mathew & Sulphey (2018) revealed that the performance of Gold and Gold ETF were almost the same. If there was a slight difference, it was because of transaction costs. Similar to other studies, the preferred mode of investment is ornaments. As per Tariq, McKechnie, Grant, & Phillips (2007), the Indian women in the City of Gold, Dubai, United Arab Emirates, buy gold once a year to give to their daughter or as gifts during weddings or as self-gifts.

Investment in gold jewellery is not a good investment option as along with the price of gold there are other costs like making charges, wastages and other brand related costs, which cannot be recovered while selling the jewellery. All these costs can be avoided when investment is made in Gold ETFs which is backed by physical gold. Investors, who make gold investment for its safe haven features, cannot rely on gold stocks or mutual funds. Instead, they need to take positions directly in bullion or gold ETFs (Pullen, Benson, & Faff, 2014). Investment can also be made in Gold futures. As per a study conducted by Mathew & Sulphey (2019), bi-directional spillovers exist across the futures and spot markets of Gold. Though it has only 3 per cent of the population, Kerala consumes 20 per cent of India's gold (Aneja, 2013). Investors in Kerala prefer to buy gold in the form of jewellery rather than Gold ETF, in spite of its advantages. In a study conducted by Mathew & Sulphey (2012), it was observed that lack of awareness about Gold ETF as a securitized gold instrument is one of the main reasons for non-investment in Gold ETF in Kerala. To the best knowledge of the researcher, no study has been conducted in Kerala about the consumers' investment decisions regarding Gold and especially Gold ETFs, in spite of Kerala being one of the largest consumers of Gold in India. In view of the problems stated above, it is imperative to study about the consumers' investment decisions regarding Gold and especially Gold ETFs in Kerala

Objectives

- To study the gold investment habits of capital market investors in Kerala

- To study about the perception about Gold Exchange Traded Fund among capital market investors in Kerala
- To identify the factors influencing the investment in Gold Exchange Traded Fund
- To built a model to identify a Gold ETF investor to a non-investor

II. Research Design & Methods

Sample and Data

A pre-tested questionnaire was prepared for collecting information regarding the Gold investment habits and perception of the people towards Gold ETFs from the investors. The data used in this study was obtained from the Keralities who are demat account holders and invest in the capital market. Multi stage random sampling procedure was carried out, firstly on the basis of location in Kerala, followed by districts in each location. The prominent brokers in Kerala were selected and the respondents were selected based on convenient sampling from the cliental of the brokers. A pilot study was conducted using the framed questionnaire with a sample of 65 respondents. Using the information on variance from the pilot study, sample size of 155 was obtained based on each response. Even though the required sample was only 155, 250 questionnaires were circulated among investors. The researcher was able to obtain 233 responses for the study. On applying Cronbach Alpha Model for reliability, it was found that the questionnaire had a reliability of 0.800.

III. Results & Analysis

Demographic Analysis

Age of the Investors

Investment decision is influenced by the age of the investors. Younger the investor the more likely they will take more risk. The investment objectives vary with the age of the investors.

It is seen from the above table that most of the investors are below 30 years of age, constituting 36.05 % of the total investors. This category is followed by the age group 31 to 40 years and above 50 years which constitute 23.61 % and 22.75 % respectively. The age group 41 to 50 years comprises of 17.60 % of the investors. The gender of the investors may influence the investment avenues and also the risk willing to be taken. It is generally considered that women go for safer investment with steady returns in contrast to male who are willing to take more risk for higher returns, Table 1 shows that 76.39 % of the investors are men compared with 23.61 % women.

Trading Experience of the Investors

An experienced investor is able to understand the market and decide the appropriate investment strategy. Table 2 shows that majority of the investors (78.11%) have experience less than 5 years, followed by investors having 6 to 10 years' experience. Only a minuscule of the investors has trading experience more than 10 years, 2.58% between 10 to 11 years and 2.58% above 15 years. It seems from the data that more and more people have started trading in the capital market since last five years.

Gold Investment

Preferred Investment Avenues of Investors

The investment preference of the investors was analysed using Garrett's ranking method. It can be inferred from table 3 that the most preferred investment avenue is Bank Deposit with a score of 59.466. It is followed by Shares and Real Estate (EMI) with scores of 55.287 and 52.311 respectively. Investment in gold occupies seventh position with a score of 47.676. The least preferred investment avenues are Government Savings like NSC and Company Deposits with scores of 45.143 and 45.787 respectively.

Gold Investment Avenues of Investors

India is the second largest consumer of Gold in the world. It can be deferred from Table 4 that in Kerala also the most preferred avenue for gold investment is Jewellery with a score of 70. It is followed by Coins and Gold ETF with scores of 62.18 and 55 respectively. The least preferred gold investment avenue in Kerala is Gold Futures.

Gold Investment Objectives of Investors

As per a survey conducted by World Gold Council in 2012, Gold is perceived as a trusted safe haven asset and demand for it persists in good times as well as in bad times. From table 5, it can have seen that one of the main reasons investors invest in gold is because it is highly liquid (57.37 score). The other important reasons are as gift to children, help in diversifying and are safe during uncertainty with scores of 55.89, 55.63 and 55.33 respectively.

Gold Exchange Traded Funds

Awareness about Gold ETF

It shows the awareness about Gold ETF as an investment avenue. The conversion of demand for gold from physical holdings to Gold ETFs depends on the awareness about the product among the investors. Most of the investors in Kerala are not very aware of Gold ETFs. Table 6 shows that around 54.9% of the investors have heard about Gold ETFs whereas 45.1% are not aware of this product.

Investment in Gold ETFs

As per the analysis done, although more than 50% of the investors were aware of the product, only 39.1% of them have invested in it as is seen from Table 7. In spite of, Kerala being one of the largest consumers of gold in India, investors in Gold ETF are less. Around 60.9% of the investors who are aware of Gold ETFs do not invest in it.

Gold ETF Investment Strategy

An investor should have a well devised strategy in place before taking decision to invest. Strategy means the plan used for investment. The strategy varies from investor to investor depending on many factors like gender, age, occupation, returns, objective, market conditions etc. The strategy helps an investor to achieve his investment objective.

The strategy for investment has been classified on the basis of holding period (years) such as less than 1, between 1 and 5, more than 5, Till some requirement for money and till physical gold is required. It is clear from table 8 that majority of the investors (58%) invest in Gold ETF for medium term i.e. between 1 to 5 years. This is followed by investment for short term (7%) i.e. less than 1 year. Only 6% of the investors hold the Gold ETF for long term i.e. more than 5 years. Around 5% of the investors sell the Gold ETFs when there is a requirement for funds. Only 3% of the investors hold for purpose of selling it and converting into gold.

Reasons for not investing in Gold ETFs

Although 54.9 % of the respondent investors were aware of Gold ETFs as Gold Investment Avenue, only 39.1 % of them invested in Gold ETFs. These respondents were asked about the factors which discouraged them from investing in Gold ETFs inspite of being aware of it.

Table 9 shows that the main reason for non-investment in Gold ETF is lack of knowledge about the product (56.64 score). The other main factors which the investors stated are that the Gold ETF does not give the satisfaction of physical gold (54.56 scores), returns from Gold ETFs are different that of physical gold (50.44 scores) and also they do not have trust in Gold ETFs (49.63 scores).

Investor perception about Gold ETF

The perception of the investors about the different aspects of Gold ETF was measured using eight variables. The perception varies from investor to investor depending upon many factors like risk profile, financial literacy, experience etc. Investors were asked to rate the Gold ETF on five-point scale according to their perception.

Factor Analysis

Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance that is observed in a much larger number of manifest variables. In this study, the perception of the investors about Gold ETF was ascertained using a measurement instrument under Likert framework consisting of 11 variables, of which 3 variables were removed as it had low Cronbach's Alpha. The responses, which are in five-point scale are used with factor analysis to reduce dimensions and to identify such dimensions resulting from the exercise. The results and the findings are narrated below:

In table 10, it is observed that the communalities show sufficiently large values suggesting that the statements are equally important for the contemplated problem. The factors extracted and the related results are given below. In table 11, it is seen that 59.56% variation in the responses on the 8 variables can be reduced to 2 variables using the standard procedure to consider those factors having Eigen values greater than 1. Thus two factors are considered and the factor loadings after rotation are reported in the table below.

In the table 12 the variables having loadings more than .59 are given. The variables collected and organized are given in the table 13. Based on the common thread seen among the statements in each group appropriate names were suggested after discussion with experts. Thus the information contained in the responses may imply the information contained in factors named as:

1. Risk Exposure
2. Ease in liquidation

Discriminating a Gold ETF investor to a non-investor

Discriminant analysis is used to model the value of a dependent categorical variable based on its relationship to one or more predictors. Discriminant analysis builds a predictive model for group membership. The model is composed of a discriminant function (or, for more than two groups, a set of discriminant functions) based on linear combinations of the predictor variables. Predictor variables are variables that provide the best discrimination between the groups. This part of the analysis is directed towards finding out the ability of the perception factors in discriminating a Gold ETF investor to a non-investor. The factor analysis with responses on a number of statements under a Likert scale framework identified 2 factors, which are named as Risk Exposure and Ease in Liquidation. These perception factors along

with age factor are used for discriminating a Gold ETF investor to a non-investor. The group statistics of the two perception factors and age factor which are taken to find out the discriminating ability are furnished below. If the means of all the three variables are considered along with the grouping variable, it is observed that, the means for investors with a Gold ETF is high when compared to investors without Gold ETF. An attempt was made to check the significance of the difference in the means across two classifying groups. From Tests of Equality of Group Means table, it was found that the means significantly differs ($p < 0.05$) among the two categories for Risk Exposure factor except for Ease in Liquidation and age factors. This shows that, there is no difference among mean Ease in liquidation score and age, among investors in Gold ETF and investors without Gold ETF. It can be generally concluded that Ease in Liquidation and age factors does not have much of a discriminating ability. Even though it was seen, this has to be proved by attempting further tests.

The Eigen value (0.179) indicates the proportion of variance explained. In this model only one canonical function is taken and thus the percentage of variance is 100%. The canonical correlation (0.390) is the correlation between the discriminant scores and the levels of the dependent variable which was found to be positively correlated. The square of the canonical correlation is 0.152 and hence 15% of the variance in the discriminating model is due to changes in the three factors. The significance of the discriminant function is tested by framing the following hypothesis

Hypothesis

H_0 : The variables considered here do not have the discriminating ability to distinguish a Gold ETF investor to non-investor.

H_1 : The variables considered here have the discriminating ability to distinguish a Gold ETF investor to non-investor.

The statistical test of significance for Wilks Lambda was carried out with a chi square transformed statistic which in this case is 20.50 with 3 degrees of freedom and was found to be significant ($p < 0.05$). Hence the hypothesis is rejected and the discriminant function can be further used for explanations. Each Standardized Canonical Discriminant Function Coefficients in absolute values reflects the relative contribution of each of the predictor variable on the discriminant function. Here it was found that risk exposure (1.106) is exerting more influence in discriminating between a Gold ETF investor to a non-investor. It is followed by Ease in Liquidation and age factors. The 'Canonical Discriminant Function

Coefficients' indicate the unstandardized scores concerning the independent variables. It is the list of coefficients of the unstandardized discriminant equation.

Here

$$\text{Gold ETF Investment} = -4.20 + (0.264 \text{ RE}) + (-0.236 \text{ EL}) + (0.028 \text{ Age})$$

Here the coefficients with large absolute values correspond to variables with greater discriminating ability. A further way of interpreting discriminant analysis results is to describe each group in terms of its profile, using the group means of the predictor variables. These group means are called centroids. 'Functions at Group Centroid' indicates the average discriminant score in the two groups. In this case it can be interpreted that, investors who had not bought a Gold ETF produce mean of -0.336, while investors who had bought Gold ETF produce a mean of 0.524. Cases with scores near to a Centroid are predicted as belonging to that group.

IV. Conclusion

Kerala is one of the largest consumers of gold in India. The study shows that the most preferred form of gold investment in Kerala is gold jewellery, followed by gold coins. It is the liquidity feature of gold which attracts the Kerala investors. Most of the investors in Kerala are not very aware of Gold ETFs and its benefits. The rate of conversion of awareness of Gold ETF to investment in it is very less. Lack of knowledge about the product is the main reason for this. Investment in Gold ETF is influenced by articles which appear in newspaper and magazines. Factor analysis was used to derive the main perception factors of the investors regarding Gold ETFs. Two factors were derived from the responses namely, Risk Exposure and Ease in Liquidation. The study used Risk Exposure, Ease in Liquidation and Age as variables to predict whether an investor will purchase Gold ETF or not. This study will be of great value to the Asset Management Companies, who must promote Gold ETFs among the investing class in Kerala through seminars, advertisements and other promotional activities.

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Table 1: Demographic Profile.

			Gender		Total
			Male	Female	
Age (in Years)	1	Below 30	57	27	84
	2	31 – 40	40	15	55
	3	41 – 50	34	7	41
	4	Above 50	47	6	53
		Total	178	55	233

Source: Survey data.

Table 2: Years of Trading Experience of Investors.

S.No.	Years of Experience	Number of investors
1	Below 5	182 (78.11)
2	6 – 10	39 (16.73)
3	11 – 15	6 (2.58)
4	Above 15	6 (2.58)
	Total	233 (100)

Note: Figures in Parenthesis Denote Percentages.

Source: Survey data

Table 3: Investment Avenues.

S.No.	Investment avenues	Garett Score	Rank
1	Bank Fixed deposits	59.466	1
2	Shares	55.287	2
3	Real Estate / Housing (EMI)	52.311	3
4	Mutual Funds	49.712	4
5	Public Provident Fund	49.557	5
6	Chit fund	47.895	6
7	Gold	47.676	7
8	Insurance	46.618	8
9	Government Savings like NSC	45.143	9
10	Company Deposit	45.787	10

Table 4: Preferences for Gold Investment Avenue.

S.No.	Gold Investment Avenues	Garett Score	Rank
1	Jewellery	70	1
2	Coins	62.18	2
3	Gold ETF	55	3
4	Gold Fund	51.03	4
5	Gold Futures	35.77	5

Table 5: Gold Investment Objectives of Investors.

S.No.	Gold Investment Objectives	Garett Score	Rank
1	It is an investment with high liquidity	57.37	1
2	It can be gifted to children at the time of marriage	55.89	2
3	It helps in diversifying investment	55.63	3
4	It is safe during uncertainty	55.33	4
5	It is a good protection against increasing prices	52.95	5
6	I want to use it as an ornament	52.06	6
7	It is more secure than other investments	50.50	7
8	It gives better returns	49.60	8
9	It is suitable for gifting	47.19	9
10	The investment is not affected by market cycle	46.27	10

Table 6: Awareness about Gold ETF.

S.No.	Response	Number of investors
1	Yes	128 (54.9)
2	No	105 (45.1)
	Total	233

Table 7: Investment in Gold ETF.

S.No.	Response	Number of Investors
1	Yes	50 (39.1)
2	No	78 (60.9)
	Total	128

Table 8: Gold ETF Investment Strategy.

S.No.	Holding Period	Number of Investors
1	Less than 1	7 (14.0)
2	Between 1 and 5	29 (58.0)
3	More than 5	6 (12.0)
4	Till some requirement for money	5 (10.0)
5	Till physical gold is required	3 (6.0)
	Total	50

Table 9: Reasons for Not Investing in Gold ETFs.

S.No.	Reasons	Garett Scores	Ranks
1	I lack knowledge about the concept of Gold ETF	56.64	1
2	It does not provide the satisfaction of physical gold	54.56	2
3	There is difference in returns from physical gold	50.44	3
4	I do not trust such instruments	49.63	4
5	It cannot be converted easily into physical gold	48.93	5
6	Its trading involves additional expenses like brokerage	48.51	6
7	Too many similar funds confuse me	47.84	7

Source: Survey data.

Table 10: Communalities- Principal Component Analysis.

S.No.	Statements	Initial	Extraction
1	Investment in Gold ETF is risky	1.000	.413
2	If I had assets in Gold ETF I would worry about them	1.000	.697
3	Chances are there that I am likely to lose money with Gold ETF	1.000	.558
4	There are wide fluctuations in investment in Gold ETF	1.000	.390
5	I might lose all money invested in Gold ETF	1.000	.639
6	I can easily retrieve my invested money in Gold ETF when I need it	1.000	.701
7	Large losses are possible with Gold ETF	1.000	.653
8	It is easy for me to understand the performance of my money invested in Gold ETF	1.000	.716

Source: Survey data.

Table 11: Total Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.460	43.250	43.250	3.460	43.250	43.250	3.027	37.842	37.842
2	1.305	16.312	59.561	1.305	16.312	59.561	1.738	21.719	59.561

Extraction Method: Principal Component Analysis.
Source: Survey data.

Table 12: Factors and Eigen Values.

Statements	1	2
If I had assets in Gold ETF I would worry about them	.802	
Chances are there that I am likely to lose money with Gold ETF	.740	
I might lose all money invested in Gold ETF	.719	
Large losses are possible with Gold ETF	.707	
Investment in Gold ETF is risky	.638	
There are wide fluctuations in investment in Gold ETF	.623	
It is easy for me to understand the performance of my money invested in Gold ETF		.845
I can easily retrieve my invested money in Gold ETF when I need it		.825

Source: Survey Data

Table 13: Factor 1 – Risk Exposure.

S.No.	Supporting Statements
1	If I had assets in Gold ETF I would worry about them
2	Chances are there that I am likely to lose money with Gold ETF
3	I might lose all money invested in Gold ETF
4	Large losses are possible with Gold ETF
5	Investment in Gold ETF is risky
6	There are wide fluctuations in investment in Gold ETF

Source: Survey data.

Table 14: Factor 2 - Ease in liquidation.

S.No.	Supporting Statements
1	It is easy for me to understand the performance of my money invested in Gold ETF
2	I can easily retrieve my invested money in Gold ETF when I need it

Source: Survey data.

Table 15: Group Statistics.

Do you invest in Gold Exchange Traded Fund?		Mean	Std. Deviation
Yes	Risk Exposure	19.9000	3.96541
	Ease in Liquidation	6.9000	1.78714
	Age	39.0400	10.42751
No	Risk Exposure	16.7051	4.31882
	Ease in Liquidation	6.8846	1.77998
	Age	38.3333	13.27400
Total	Risk Exposure	17.9531	4.45248
	Ease in Liquidation	6.8906	1.77575
	Age	38.6094	12.20251

Table 16: Tests of Equality of Group Means.

	Wilks' Lambda	F	df1	df2	Sig.
Risk Exposure	.876	17.758	1	126	.000
Ease in Liquidation	1.000	.002	1	126	.962
Age	.999	.101	1	126	.751

Table 17: Eigen values.

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.179 ^a	100.0	100.0	.390

a. First 1 canonical discriminant functions were used in the analysis.

Table 18: Wilks' Lambda.

Test of Function(s)	Wilks' Lambda	Chi-square	Df	Sig.
1	.848	20.500	3	.000

Table 19: Standardized Canonical Discriminant Function Coefficients.

	Function
	1
Risk Exposure	1.106
Ease in Liquidation	-.420
Age	.342

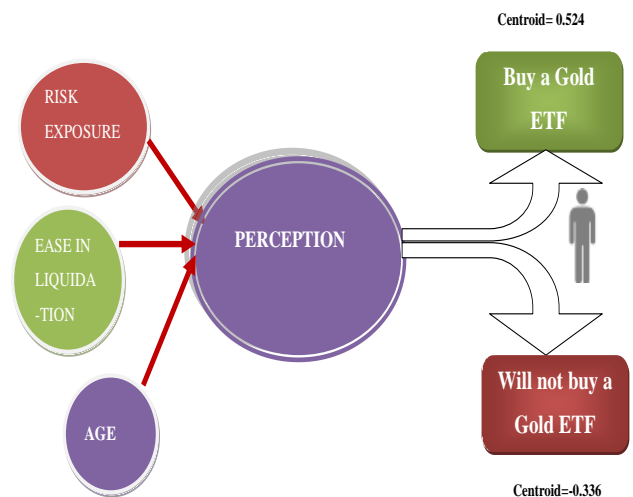
Table 20: Canonical Discriminant Function Coefficients.

	Function
	1
Risk Exposure	.264
Ease in Liquidation	-.236
Age	.028
(Constant)	-4.200
Unstandardized coefficients	

Table 21: Functions at Group Centroids.

Do you invest in Gold Exchange	Function
	1
Yes	.524
No	-.336
Unstandardized canonical discriminant	

Figure 1: Model.



MAKING WORK PLACES SAFER FOR WOMEN

Sheetal Kapoor* Jigmet Wangdus**

In this changing world and marketplace, every organisation understands the importance and advantage of having a diverse workforce supported by both men and women equally (Green, Lopez, Wysocki & Kepner, 2002). Sexual Harassment (SH) is one of the biggest challenges faced by women at workplace across the globe (Srivastava, 2010) Studies show that while fulfilling duties at workplace many individuals generally who are in power commit offences of sexual harassment believing that there will be no action taken against them. Although the working institutions have gone a long way in modernisation and development, the cases of sexual harassment continue. According to World Policy Analysis Centre nearly 235 million women Worldwide lack legal protection from sexual harassment at workplaces. In India research by Business Standard in 2017 found that 70% of the cases of sexual harassment of women go unreported. Supreme Court in Vishakha case for the first time brought guidelines for ensuring a safe environment at workplace in India. The guidelines later helped to enact Prevention of Sexual Harassment (POSH) Act 2013. Sexual Harassment not only causes physical pain, but the victim goes through mental and emotional trauma. In this paper the author attempts to understand that inspite of such a powerful POSH Act in India, why the number of cases of sexual harassment are increasing and makes recommendations for creating awareness amongst masses so that we are able to create a healthy work culture.

Keywords: Sexual Harassment, Me Too, workplace, mediation, empowering, POSH Act.

In the 21st century both developed and developing countries economy are growing rapidly creating huge employment opportunities across different sectors (Poonia, 2019). With better education and skills, women are rising up the ladder and are at par with men. In many fields women are also seen to outperform men. However, managing a diverse workforce is the biggest challenge faced in today's time. Many a times the diverse workforce may work as a liability instead of being an asset because of mismanagement within organisation. The benefits of diversity in workplace are reduced lawsuits and increased recruitment, increased goodwill of company and more business opportunities (Esty, Katharine, Griffin & Hirsh, 1995). Managing diversity is not just about recruiting diverse workforce, it is about understanding the differences, fighting against discrimination and promoting an inclusive environment (Green, et al, 2002). Every organisation is responsible to provide a safe and positive working environment to each and every employee working within the organisation. Providing a safe working environment does not just remain something mandatory by law rather the organisation must actively participate in making a safer workplace. A safe working environment always build good organisational image and it also contributes directly through better productivity of their employees. The equality at workplace is the fundamental right and no one must be denied of it irrespective of gender, class, colour,

religion etc. Although the working institutions have gone a long way in modernisation and development, the cases of gender discrimination and sexual harassment continue. The number is increasing with the coming of the digital era. Many women have come out in social media to share their horrific stories with the public.

According to government data 99% cases of sexual assaults go unreported in India. The unit-level data of the National Family Health Survey (NFHS) conducted in 2015-2016 shows that an estimated of 99.1% of sexual violence cases are not reported in general. In a survey conducted by Indian Bar Association in 2017, 70% of women out of 6047 did not report sexual harassment by their supervisors. And in another research carried out by Pink Ladder through its International Alliance for gender studies in 2019 across 200 women from 80 organisation across Bangalore, Mumbai, Delhi, Chennai, 56% of the women believe that the sexual harassment at workplace has increased over the years and 53% has been subject to sexual harassment in form of sexual comments, gestures, jokes at the workplace.

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I. Review of Literature

Sexual harassment is a universal problem being faced across different organisation including corporate, education institution, government offices, hospitals, sports, domestic households etc (Thomas, 2015, Fasting et al 2011, Child 2010, Chaudhuri 2007, Fitzgerald et al 1988). A study in US found the majority of harassment is not physical violent but it reflects the intrusive and coercive sexual attention (Fitzgerald 1993).

According to government data 99% cases of sexual assaults go unreported in India. The unit-level data of the National Family Health Survey (NFHS) conducted in 2015-2016 shows that an estimated of 99.1% of sexual violence cases are not reported in general (Bhattacharya, 2018). In a survey conducted by Indian Bar Association in 2017, 70% of women out of 6047 did not report sexual harassment by their supervisors (Chachra, 2017). And in another research carried out by Pink Ladder through its International Alliance for gender studies in 2019 across 200 women from 80 organisation across Bengaluru, Mumbai, Delhi, Chennai, 56% of the women believe that the sexual harassment at workplace has increased over the years and 53% has been subject to sexual harassment in form of sexual comments, gestures, jokes at the workplace (Sarkar, 2019). Lack of confidence and the high level of tolerance for injustice by women have resulted into people taking undue advantage and sexual harassment (Thomas, 2015). According to Thomas (2015) the impact of sexual harassment varies from person to person and generally the victim experience fear and discomfort of personal life, stress on peer relationship, defamation of character, Anxiety, depression, low self-esteem, social isolation, increase absenteeism, Illness and trauma and loss of career.

II. Research Design & Methods

Objectives of the study

The 'Me too' cases tell us is that the movement has given strength to women and made them believe that if they stand together for a cause they strongly believe in it no matter how powerful their boss or colleague is based on the above the objectives of the study can be grouped as follows:

- To find out the laws in India to protect women workers against sexual harassment.
- To understand the sexual harassment prevention laws in India with regard to implementation, compliance & redressal mechanism.
- Compare Indian laws for protecting women with laws in United States.

- To find the lacuna in the Indian laws and make recommendations to make workplaces safer for women.

Significance of the Study

Laws play an important role in ensuring the safety of women at workplace. Through laws a fear is being created in the minds of those who take to doing such heinous acts. Over the years what gave the wrong doers confidence was that no matter what they do the victim will not be able to report the same on account of shame and even losing their jobs. However, with social media and the power shown by 'me-too' movement now, it is clear that unlike earlier time's women now have a platform to share their issues. Hence along with this if strict laws and punishment for wrong doers is put in place no one would ever think of doing such acts at workplace. In India, stricter laws regarding sexual harassment came after the harrowing Nirbhaya rape case in 2012. This case was also being a wakeup call for the nation in realising that although many laws are in place, there is no fear amongst them and many culprits are confident of getting away in sexual harassment cases due to loopholes in the system. Hence a need arises to review India's sexual harassment laws from time to time to ensure the wrong doers don't escape so easily. Lack of awareness amongst victims, poor implementation and strict compliance can ensure that no woman becomes victim of sexual harassment in given situations.

Research Methodology

The methodology adopted for the study is conceptual analysis based on review of existing laws. Firstly, a theoretical framework of the laws prevailing in both countries was developed by referring the legal materials, law books and cases reported on sexual harassment at workplace. Secondly to understand the chronological development of work in this area a thorough review of published research papers and articles were reviewed. Finally, to understand the current scenario and to obtain factual data reports of several NGO's, government organisations and ministries were looked into. By adopting this method, a theoretical background is built on which study can be developed. Later previous works in the area are analysed to find gaps and these are being fulfilled by integrating data from current reports and news.

III. Results & Analysis

This Section is divided into two parts:

A) History of sexual harassment Law in India

The judgement of Supreme Court of India on “**Vishakha Ors vs Government of Rajasthan & Ors**” was the stepping stone towards ensuring a safe working environment, free from sexual harassment for all employees at the workplace. For the first time Supreme Court acknowledge the gravity of sexual harassment of women and laid down guidelines mandatory for employer to prevent sexual harassment known as “Vishakha Guidelines 1997”.

The Vishakha Guidelines are based on Bhanwari Devi case. She was employed by state of Rajasthan as a “**Sathin**” a change agent working towards prevention of child marriages. While doing her job she prevented the marriage of one-year-old girl but she faced resentment and harassment from the community. Even after report of such incident no action was taken by local authority and later she was gang raped. This incident revealed the issues and challenges faced by women at workplace and the severe consequences where no action was taken against the culprit. Based on this case a Public Interest Litigation (PIL) was filed with Supreme Court by Vishaka and other women groups against the State of Rajasthan and Union of India.

The SC proposed sexual harassment be recognised as violation of fundamental rights under article 14, 15, 19(g) of constitution right to equality and article 21 rights to life and live with dignity. Before 1997 there was a continuous pressure from international organisation on India to enact and enforce law to ensure the safety of women and no violation of human right (Right to life and live with dignity under article 21 and right to equality under article 14 & 15). India has also signed Convention on elimination of all forms of discrimination against women (CEDAW) on 30th July 1980 and later ratified it on 9 July 1993. Since there was no domestic law in India, there was an international obligation to ensure safe working environment. “The sexual harassment of women at workplace (Prevention, Prohibition and Redressal) Act”, 2013 came into force on 9th December 2013. The POSH act scopes extends to public & private places including schools, colleges and it cover the transportation taken and places visited during the course of employment.

B) History of Sexual Harassment Laws in United States.

In United States the first law towards a safe working environment was ensure by Civil Right Act (CRA) 1964, Title VII Sex Discrimination under the president Lyndon B Johnson, though it was written under President John F Kennedy. Initially the law was opposed by the movement of rights for African- American because they thought

protection against sexual discrimination would kill the Civil Rights Act. Later the fourteenth Amendment to the US constitution granted “Equal Protection Under Law”. Sexual harassment was included under the Act by precedent in 1986, when the Supreme Court recognized it as unlawful in the case of Meritor Savings Bank v. Vinson. This landmark decision enabled victims of sexual harassment to sue their employers for monetary damages. Title IX, Education Amendments of 1972 which addresses sexual harassment in schools. Most of the sexual harassment laws were made in the courts, the legislature did intervene with the passage of the Civil Rights Act of 1991 (CRA 1991). This legislation was passed in the wake of the nationally televised senate hearings, where Anita Hill alleged that Supreme Court nominee Clarence Thomas had sexually harassed her years before. The CRA 1991 allowed courts to award plaintiffs punitive and compensatory damages for “future pecuniary losses, emotional pain, suffering, inconvenience, mental anguish, loss of enjoyment of life, and other non-pecuniary losses” in sexual harassment cases. The 1991 amendment also gave plaintiffs the right to a jury trial and, in general, strengthened sexual harassment law under Title VII.

Other International Laws and Policies for Addressing Sexual Harassment in The Workplace include:

- **The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW):** was adopted on December 1979. CEDAW directs all parties to take effective measures to end discrimination and to ensure safe working environment.
- **United Nation General Assembly Resolution 48/104 on the Declaration on the Elimination of Violence Against Women:** Even after adoption of CEDAW violence on basis of gender especially against woman remains a continuous problem, as a result the General Assembly issued resolution to ensure world free of gender based violence on 20th December 1993.
- **UNITE to End Violence against Women:** This initiative was launched in 2008, it aims to raise awareness to public and increase the resource dedication and policy making to curb/stop the violence against women and girls across the nations.
- **The ILO Committee of Experts on the Application of Conventions and Recommendations (CEACR):** which is an independent body composed of 20 outstanding legal experts has confirmed that sexual harassment is a form of sex discrimination under Discrimination (Employment and Occupation) Convention (No.

111) of 1958. The ILO's Indigenous and Tribal Peoples Convention (No. 169) also specifically prohibits sexual harassment in the workplace.

Defining sexual harassment

US department of state defines sexual harassment as unwelcome sexual advances, requests for sexual favours and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- An employment decision affecting that individual is made because the individual submitted to or rejected the unwelcome conduct; or
- The unwelcome conduct unreasonably interferes with an individual's work performance or creates an intimidating, hostile, or abusive work environment.

In United State the sexual harassment law is primarily a large part of Employment Discrimination Law, Civil Rights Law and in some cases, may also result in a Personal Injury Lawsuits. The word sexual harassment is not clearly defined and it is subjected to the interpretations by various courts.

In US Sexual Harassment is divided into two main categories:

- **Quid Pro Quo:** is the more overt form and refers to an individual in a position of power demanding sexual favour or acts in return for some employment benefits at workplace like promising promotion.
- **Hostile Environment:** is more common at workplace but it is difficult to prove. This exists when the activities of others within the organisation made someone feel uncomfortable and suffers mental and emotional strains. The activities include offensive sexual talks, jokes, pornographic images, repeated unwelcome sexual advances.

There is a clear definition of sexual harassment in India under POSH Act 2013: sexual harassment includes any one or more of the following unwelcome acts or behaviour (whether directly or by implication) namely: -

- (i) physical contact and advances; or
- (ii) a demand or request for sexual favours; or
- (iii) making sexually coloured remarks; or
- (iv) showing pornography; or
- (v) any other unwelcome physical, verbal or non-verbal conduct of sexual nature;

Compliance and Redressal

The compliance and redressed are the backbones of law to prohibit SH through strict compliance and fast redressal mechanism. The United States system holds employer financially liable for any sexual harassment

cases within the organisation (Saguy, 2012). As a result, corporation have developed corporate regulation to punish sexual harassers and prevent sexual harassment at the first place. Comparatively Indian law does not hold employer liable for sexual harassment as a result there is less awareness of sexual harassment at workplace. The United States does not have any federal sexual harassment statutes. Rather U.S. sexual harassment "law" is comprised of case law, or court rulings interpreting other statutes (Saguy, 2012). In India we have POSH act 2013 for Prohibition, Prevention, and Redress of sexual harassment at workplace.

The Equal Employment Opportunities Commission (EEOC) is the federal agency responsible for establishing and administering guidelines and regulations addressing sexual harassment by way of Title VII of the Civil Rights Act. In addition, many states have enacted Fair Employment Practice (FEP) laws which address and regulate sexual harassment on the state level. However, most of these statutes do not provide for recovery of personal injury damages in a sexual harassment claim. If an organisation has an established sexual harassment policy in place, it is usually necessary to follow the steps and procedures sets up by the policy and only then after the employee can escalate the complaint to the EEOC or a state FEP agency. Once the compliance with the company policy has failed to resolve the problem, the employee may proceed with a claim outside of her/his employer's purview. In United State the EEOC and state FEP agencies usually offer alternate dispute resolution (ADR) services as a means of resolving a sexual harassment dispute without formal legal involvement and excessive expense. A small minority of state level agencies have also established administrative courts which will hear the complaint and may award compensatory money damages for personal injuries sustained by the employee due to the sexual harassment.

In India the POSH Act 2013 requires every organisation with employee more than 10 to constitute a committee known as internal committee in each and every administrative unit, branches and offices. At least 50% of total nominated member shall be women. It is important to have maximum women representations in such committees so that women can raise their voice more strongly. If the number of workers is less than 10 or if the complaint is against the employer himself then the acts provides provision to constitute Local Committee by district officer at district and block levels. When an employee has exhausted the services of the EEOC or state FEP agency without resolution of her/his complaint, only then she/he may sue. Usually the government agency will

issue a legal document, most often called a "right-to-sue letter" that allows the employee to file a civil lawsuit. Because most FEP laws don't provide for the recovery of damages for physical, mental and emotional injuries, it is generally more profitable to file suit under the U.S. Civil Rights Act. It is important to determine, however, whether the employer meets the guidelines stipulated by this law in order to be eligible to recover the maximum amount.

The sexual harassment is not just restricted to corporate; the numbers of cases are also increasing in educational institutions. These claims were brought under Title IX of the Educational Amendments of 1972. This includes harassment by teachers and professors against students and sexual harassment by students against other students. These types of claims have only recently been legitimized by a couple of U.S. Supreme Court cases in the 1990's. To deal with false allegation in United States there is provision for anti-retaliation provisions where even in case of lack of merits the employer may not take negative action against an employee who have filed false allegation. In India the law provides safeguard against false allegation at workplace.

In United States Employer are liable for unlawful Harassment by supervisor. In *Burlington Industries, Inc. v. Ellerth*, 118 S. Ct. 2257 (1998), and *Faragher v. City of Boca Raton*, 118 S. Ct. 2275 (1998), the Supreme Court made clear that employers are subject to vicarious liability for unlawful harassment by supervisors. The standard of liability set forth in these decisions is premised on two principles: 1) an employer is responsible for the acts of its supervisors, and 2) employers should be encouraged to prevent harassment and employees should be encouraged to avoid or limit the harm from harassment. In order to accommodate these principles, the Court held that an employer is always liable for a supervisor's harassment if it culminates in a tangible employment action.

In India the employer or District Officer is responsible for prevention, prohibition and constitution of redressal mechanism. Many a time laws fail to redress the issue in reasonable time period. The Act ensures fast enquiry and judgement as the employee needs to complain within 3 months and the committee needs to complete the investigation within 90 days and send the report to District office, who have to take action within 60 days.

In United States the anti-discrimination laws also give individual a limited period of 180 days to file complain from the day discrimination took place. The 180 days can

be extended to 300 days if the state agency or authority enforcing this law.

In India the law prescribes a penalty of INR 50,000 to employer for non-compliance of any provisions and any repetition could result into double penalty and company's registration and license will be revoked. In cases where employee found guilty of sexual harassment, the punishment is with respect to service rule or action like warning, denying promotion and pay rise or increments followed by severe action of termination from service. In United States the penalty is different in different states and most of the times it depends upon courts judgement.

In United States Mediation is also one of the ways to resolve the cases of sexual harassment. The supreme court of US encourages companies to add mediation and arbitration clause in employment clause. It is an informal way where the parties use a trained mediator who facilitates communication between two. The management is obligated to send representative to table if the employee chooses to attempt resolution through mediation. In cases of no resolution, the parties can continue to raise their rights in other appropriate forum. The facility of mediator in India is not available.

The #MeToo movement started in the west but have become a social phenomenon around the world. It has provided a platform for women from developed western countries like USA and the developing countries in east like India to share their past experience, the mental and emotional trauma that one has gone through due to harassment at workplace.

In response to the #MeToo movement many states in US has reviewed their law and in 2018 Washington and California has changed their laws to stop employers from use of mandatory non-disclosure agreements for employees asserting sexual harassment and abuse claims (Seyfarth, 2020).

IV. Conclusion

The overall recommendation for an effective formulation and implementation of a Sexual Harassment prevention and redressal mechanism:

- Sensitise all individual within organisation about sexual harassment. The physically and emotionally trauma and the pain one goes through.
- The law must make it mandatory for all organisations to create policies for zero tolerance of sexual harassment at workplace.

- It should be made mandatory for organisation to make employee aware about the laws against sexual harassment, the redressal mechanism and the consequences through poster, lectures, workshops, seminars, training and other events.
- For easy approach and accessibility, the details of ICC and its members must be share to all employees.
- Greater role of organisation to prevent sexual harassment than the redressal. The organisation must take the initiative irrespective of laws to provide a safe workplace for all its employees.
- More transparent and fast redressal mechanism is needed. Many a time justice is delayed for a longer period of time which doesn't serve the purpose of justice.
- Mediation and arbitration must be added into provision in India for fast and unbiased redressal and resolution.
- Policies to empower women and reservation for women at top level management
- Law must ensure that the system does not continue to revictimize the victims.
- Amend law against SH at workplace to include LGBTQ community.
- Law must also ensure that there is no misuse of the law by any individual.
- Finding a right candidate to act as the presiding officer and/or internal member of the IC must be provided in law for effective functioning of IC and adjudication of the complaint.

In the recent past laws have been framed to ensure safe workplace for women but a lot needs to be done from implementation side. Education empowers every individual to stand for their rights and raise their voice against any discrimination, violence, harassment at any place. It has provided platform like social media to communicate and raise their voice to be heard by every once across the globe. Over the period both India and USA have enacted stringent laws for prevention, prohibition and redressal of sexual harassment cases but in India there is lack of awareness of sexual harassment among the employee. The differences in the approaches in US and India are because of the differences in the tradition and the culture in two nations. In United States the organisation takes the initiative by framing extensive sexual harassment policies and the issues is being discussed in the public whereas in India the issues are not discussed or they are discussed at individual level. The feminist activists played an important role in both the countries to enact stringent law, they have continuously fought for the women rights and other discrimination faced at workplace.

The implementation of any law or policy in India is a big challenge as studies have revealed that employer either chose to ignore the guidelines and acts. Comparatively in US strict compliance of these laws is also ensured. This is partly on account of the cultural differences in people of both the countries. US in general have their law-abiding citizens due to strict legal mechanisms in place. In case of India all though several laws are in place, people are used to finding loopholes in the system to get away from them.

For a better and safe workplace, different stakeholder including employee, employer, organisation, and government must support and cooperate to frame and implement stringent policies to prevent any kind of sexual harassment at workplace. A lot needs to be come from the employee and the employer as work culture of any organisation is being defined by them. The culture with zero tolerance and harsh punishment like expelled from job and imprisonment needs to be promoted throughout the world.

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ROLE OF HR DEVELOPMENT FOR PRODUCTIVITY & EFFICIENCY-CASE FOR APPAREL MANUFACTURING

Dhwani Gambhir*

Productivity and efficiency improvements are crucial for sustainable growth of manufacturing firms. Apparel manufacturing is a crucial industry for employment generation in developing economies due to its labour intensive nature. This paper highlights the significance of sound human resource (HR) management and development for ensuring optimum productivity and efficiency in apparel manufacturing. A qualitative and descriptive study using secondary sources has been conducted for the purpose of this paper. It is found that productivity and efficiency is linked to labour performance and influenced by training and development. It is imperative for firms to focus on improving the skills and quality of workers and managerial personnel. In addition, suggestions are presented for leveraging technology and digital tools for developing HR in apparel manufacturing firms.

Keywords: Productivity, Efficiency, Apparel Manufacturing, Human Resource, Personnel Development.

The sustainable growth of manufacturing firms is pivotal to sustained growth and employment in an economy. For a manufacturing firm, sustainable growth depends vastly on productivity and efficiency in production (Mahadevan, 2002). Apparel leads in global manufacturing sector and the growth of apparel manufacturing is seen integral to employment and women economic participation. Likewise, in India, apparel manufacturing is a key industry and contributes a vast share of the exports and output. Moreover, India has specific competitive advantages in apparel exports (Balaram, Yadav, & Baisya, 2002).

In addition, manufacture of wearing apparel is a leading industry in the Micro, Small and Medium Enterprises (MSME) sector (Ministry of MSME, 2019). MSME firms generate employment by making intensive use of labour-intensive and simple technology. They are of socio-economic significance in multiple ways (Tambunan, 2006). Despite remarkable and improved performance, there is a great scope of improvement in this industry overall in terms of production efficiency and productivity. It is important to highlight the significance of Human Resource (HR) in any attempt to improve productivity and efficiency performance of apparel manufacturing firms. It is equally important to design suitable measures to develop, train and retain labour and managerial personnel. This paper aims to study the significance of human resource (HR) management and development for improving productivity and efficiency in apparel manufacturing. The paper is organized as follows. The

next section covers the review of literature, followed by the research design and methods. The fourth section covers the discussion. Limitations and further scope are given next, while the last section gives the conclusion.

I. Review of Literature

The literature reviewed has been classified thematically into separate groups and presented below. Apart from productivity and efficiency studies in general and those concerned with the apparel manufacturing sector, studies related to MSME sector have been reviewed as well given the significance of apparel manufacturing for the sector.

Productivity & Efficiency Studies

There are many studies across the world on productivity and efficiency in manufacturing sector. Hsu and Chen (2000) employed a two-stage switching regression model to estimate labour productivity for small and large firms in Taiwan. Pandey and Dong (2009) compared the manufacturing productivity for India and China. They found that over 1998-2003 manufacturing productivity of all 2-digit level industries improved significantly in China compared to that in India. Milana, Nascia, and Zeli (2013) studied the multifactor productivity at the firm-level in Italy using data envelopment analysis (DEA). They found stagnation in the Italian industries. To study trends in productivity for Indian manufacturing in the

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before and after economic reforms period extensive work has been carried out by researchers (Babu & Natarajan, 2013; Kumar, 2006; Kumar & Basu, 2008; Pradeep & Chen, 2012; Rath & Madheswaran, 2008; Sehgal & Sharma, 2011; Singh, 2013; Unel, 2003).

Sharma (2008) studied the technical and scale efficiency for cement firms in India and found that only half of the sample firms were efficient. Joshi and Singh (2009) revealed a negative total factor productivity (TFP) growth in Textile industry using MPL. Tripathy, Yadav, and Sharma (2009) carried out an efficiency and productivity analysis for the Indian pharmaceutical industry. They found sub-optimal efficiency and stagnating productivity. Sharma, Upadhyay, and Tyagi (2010) used growth accounting to study productivity in Indian textile industry and reported a negative trend in TFP growth. Sharma and Sharma (2010) studied technical and scale efficiency using a cluster approach for small scale sector.

However, partial productivity for labour showed some gains. Kiran and Jain (2012) studied productivity for the period 1994-2008 in Punjab SME manufacturing and Indian Manufacturing Industries. The results indicated that there was a positive correlation between TFP and the total remuneration. Gambhir and Sharma (2015a, 2015b) assess the TFP in the textile manufacturing sector in India using firm-level secondary data. They report a nominal progress in TFP; and firm size and exporting as drivers of TFP. Kundi and Sharma (2015, 2016) studied the efficiency in the Indian cement and glass industry using firm level data. They found that overall efficiency in the glass industry is better as compared to the cement industry. Apparel manufacturing – productivity and efficiency studies.

Global studies

Stochastic frontier analysis (SFA) has been used by a number of studies for analyzing efficiency using firm level data (Chapelle & Plane, 2005; Hill & Kalirajan, 1993; Wadud, 2004). For studies analysing technical efficiency and productivity, DEA, MPI and tobit regression have been used extensively (Suyanto, Bloch, & Salim, 2012; Vixathep & Matsunaga, 2012a, 2012b; Gambhir, 2018).

India Specific Studies

Many studies focus on studying efficiency and productivity of the apparel industry in India (Bhavani & Tendulkar, 2001; Bheda, Narag, & Singla, 2001, 2003; Hashim, 2005; Joshi & Singh, 2009, 2012; Gambhir, 2018; Gambhir & Sharma, 2017, 2019).

Bheda, Narag, and Singla (2001) used primary data to study productivity of apparel manufacturers and found that firm characteristics influenced performance. Joshi and Singh (2009) used primary data for computing efficiency of garment firms in Bangalore, India. They suggested that firms should adjust plant size to enhance performance. Joshi and Singh (2012) studied technical efficiency and the drivers influencing it using secondary data from government. They found small scale firms to be better performers and reported that productivity growth is largely based on technical efficiency change. Gambhir and Sharma (2017) examine the technical and scale efficiency performance of micro apparel enterprises in the Indian manufacturing sector using data envelopment analysis and secondary data. They report a widespread inefficiency in the sample studied. Gambhir (2018) is a detailed study on the productivity and efficiency of apparel manufacturing at multiple levels of analysis. It makes use of both secondary data and primary data for analysis. It contains valuable policy suggestions for both firms and government as well. Gambhir and Sharma (2019) studied efficiency of micro, women enterprises in the Indian apparel manufacturing sector. They reported a very poor efficiency status and under usage of plant capacities in majority firms. Gender of the firm manager was found to have no significant influence on performance.

MSME sector

Influence of Scale on Performance. There is no consensus in literature with respect to influence of scale on the performance. While some studies found that the performance of small-scale sector is better (Deshmukh & Pyne, 2013; Joshi & Singh, 2010; Kiran & Jain, 2012; Pandey & Dong, 2009; SIDBI, 1999), others found large scale firms more efficient performers (Goldar, 1988; Unel, 2003; Wadud, 2004). Studies have reported growth in the sector in India as a major economic contributor (Garg & Walia, 2012; Singh, Verma & Anjum, 2012).

Challenges faced

The MSME sector faces various challenges related to finance and capital, marketing, administration, infrastructure & utilities, and labour management (Hossain, 2013; McKinsey Global Institute, 2014; Tambunan, 2011).

II. Research Design & Methods

Research Objectives

The review of literature highlights that developing human resource in a labour intensive manufacturing is important to performance. However, there is dearth of studies that

specifically highlight this importance in respect to productivity and efficiency in the apparel manufacturing sector in India. The specific research objectives for the paper are listed below:

1. To understand the significance of human resource (HR) management and development for ensuring optimum productivity and efficiency in apparel manufacturing.
2. To suggest ways for developing HR in apparel manufacturing firms by leveraging technology and digital tools.

Research Method

A qualitative and descriptive study using secondary sources has been undertaken. Although qualitative research may draw data from several sources, this study restricts itself to an analysis and inference from existing quantitative and qualitative research published in relation to productivity and efficiency, apparel manufacturing, MSMEs, labour in manufacturing etc. Productivity enhancement and related issues are considered as appropriate areas for qualitative research (Cooper, Schindler & Sharma, 2012).

III. Results & Analysis

Significance of Human Resource for Productivity & Efficiency Performance

In a labour-intensive industry such as apparel manufacturing, labour plays a significant role in production process and performance of firms. It influences the growth and survival of firms in a highly competitive business environment. Labour related issues form major constraints for apparel exporting firms in developing countries (Balaram et. al, 2003). The type, number and quality of labour and personnel employed in a firm, all have an impact on the firm's performance and growth. Labour discipline and work ethics have a significant influence on the sustained success in apparel manufacturing sector (Kim, Traore, & Warfield, 2006). Sharma and Gambhir (2017) study the case of the Indian apparel retail brand BIBA. As the organization grew and needed to improve efficiency, they could no longer ignore lax labour behaviour. "They implemented advanced planning, controls, and quality checks on their supply chain".

Singh (2012) reported that workers from semi-skilled and skilled manufacturing in India may have withdrawn on account of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). Hence, Indian manufacturing is facing a labour crunch which is resulting in higher wages and labour costs. To counter the

effect of this on firm growth, it is crucial that labour gives optimal performance at work.

Hossain and Karunaratne (2004) also found that inefficiency was influenced by the proportion of non-production labour employed. Gupta (2010) found that improvement in labour productivity reduces underutilization of materials which adds to TFP when measured in terms of value added. Wei and Hao (2011) used SFA to study TFP growth in China and reported that "human capital has significant and positive effects on the TFP growth". Bheda et al. (2003) found that enterprises had higher productivity through technological upgradation and managerial training. Singh (2013) provided a complete overview of the manufacturing sector and he also gave suggestions for performance improvement in the sector which stressed on skill development and employment.

Trivedi (2000) studied TFP using panel data for major Indian manufacturing industries and found that productivity of labour for such industries was more than the aggregate manufacturing sector. This means that higher labour productivity improved performance of the industries within the sector. She suggested that a major reason pulling down productivity in the manufacturing could be the inability of firms to optimise the labour input. Islam and Syed Shazali (2011) studied the labour-intensive manufacturing industries in Bangladesh. They reported that there is a weak but positive correlation between productivity and degree of skill. Gambhir and Sharma (2015a, 2015b) study the TFP in Indian textile manufacturing sector at the firm-level. They find that pure efficiency change, which relates to operational efficiency and resource usage; and is largely within a firm's control, shows deterioration. This also has implications for developing quality and skills of labour and managerial personnel. Gambhir (2018) further reported that labour and related issues are the main concern for the sector and HR development would lead to improved efficiency and productivity performance at the firm-level. On extensive perusal of existing research, it has been observed that productivity and efficiency have links to labour performance, which is influenced by training and development. This makes it imperative for firms to focus on improving the skills and quality of workers and managerial personnel.

Developing Human Resource in Apparel Manufacturing
Productivity improvements can yield better result if the focus is bottom-up. This approach requires workers to engage in personal improvement and gives them a sense of control and focus. In turn, they feel happy and content

with their contribution to the firm (Jagoda, Lonseth, & Lonseth, 2013). Gambhir (2018) also summarized that “the core of efficiency performance lies with the individuals at work” and “building a supportive work environment”. It is of great value and importance that specific models or techniques are used to motivate employees for productivity improvement in a manufacturing unit (Prasada Rao, 2006).

There is a need to develop training and quality programmes in a manner that gives improved efficiency results and optimizes resource usage in firms. “The firms should conduct appropriate training and skill enhancement programmes either independently or through support agencies for the labour and supervisors to ensure efficiency and productivity. The content and outcome of the training conducted should be in tune with the requirements of the firms.” In addition, government policy support should make skill development and training the top priority for the sector (Gambhir, 2018). Since the apparel sector has a lower skill requirement, simpler techniques and tools for skill development, quality and performance improvement and community building may serve very well in the long run. In order to promote sustainable, inclusive growth it is important to focus on both individual development as well as team building at the grassroots. As a term, e-HRM, signifies the combination of HRM and information technology (IT), in a manner that targets value creation for workers, employees and management (Bondarouk & Ruël, 2009).

Even though there are several issues and challenges to address regarding the digital tools (Bondarouk & Ruël, 2009), in the current digital age, it is easier for firms to leverage technology by using digital tools and social media in HR development. The firms with “performance management strategies that help employees develop expertise that maximizes their potential”, and “innovative approaches to the design and delivery of HRD initiatives”, are doing better in the economic, competitive scenario (Cascio, 2014).

The innovative, digital initiatives extend from “technology-delivered instruction (such as mobile and virtual applications, simulations) and social-learning tools (such as wikis, communities of practice, social media)” and enhance retention of employees (Cascio, 2014). Social media tools, such as Twitter, Instant Messaging (IM) and Facebook can serve as “collaborative media”, to “enhance and advance workplace learning and knowledge management” (Thomas & Akdere, 2013). Some specific suggestions for the Indian apparel manufacturing firms are listed below.

- The firms can make official, private groups on Facebook and Instant Messaging Apps to promote sense of community, improve communication and information sharing.
- The firms should share links to motivational, learning as well as self-development videos on platforms such as YouTube. In addition, they can share links to videos that relate to production skills and manufacturing process to the workers which can be viewed at leisure by them.
- The firms can introduce managerial personnel to various simulation games available through apps or online which are designed towards manufacturing performance and process improvement. This will improve problem solving and decision-making skills.
- If the firms are unable to organize in-house workshops, which target both performance related and wellness related issues, for the workers and managerial personnel then they can arrange for web streaming or video conferencing.
- The firms can use or encourage employees to share real-time images and videos and give updates through video calls regarding production related matters.

The paper is limited by its choice of industry selected and the research design adopted. There is further scope to study empirically the impact of HR development on the productivity and efficiency performance of apparel manufacturing enterprises.

IV. Conclusion

The sustainable growth of manufacturing sector depends on enhancing competitiveness. For remaining competitive, productivity and efficiency play a role. Apparel Manufacturing sector has a significant contribution to socio-economic development in developing economies. Such economies require the apparel manufacturing sector to enhance productivity and efficiency to capture a large share of the global market. Human Resource (HR) plays a pivotal role in labour-intensive apparel manufacturing sector. It is relevant to study the role it plays in productivity and efficiency improvement as well. For the first research objective, the extensive perusal of research literature has validated and established the significance of HR and its management and development for maintaining and improving the productivity and efficiency performance in apparel manufacturing sector. In respect of the second objective, it is suggested that firms should focus on using simpler technology tools and social media to train, motivate and develop HR. The focus should be on individual growth as

well as team building. The inferences of this study maybe useful for other labour-intensive industries in developing countries as well.

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ACHIEVING DISRUPTIVE GROWTH & TECHNICAL INNOVATIONS: IN & THROUGH THE HR

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With the transforming business and client requirements, organizations today are shifting towards developing techno-functional skills such as Artificial intelligence, blockchain, cloud, security, etc. Clients are looking for creative solutions using disruptive technological innovations which would provide long term benefit and tackle the ever-growing issue of competition in the market. In order to develop transformative creative solutions, organizations have identified the need for recruiting a technically sound work-force and up-skill the already existing workforce. The HR function is the connecting link between the organizational values, vision and it's people. HR helps recruit the candidates which would be the ultimate fit for the role, retaining the most talented individuals with advanced skill sets and develop the skills required for the organization to achieve its goals. This paper unravels the importance of up-skilling the human resource department of organizations, highlights how HR plays a pivotal role in the early adoption of the digital era in the organizations and can empower new technologies such as Artificial Intelligence. The research is a qualitative one that involves interviews from professionals from the HR industry of top tier firms, start-ups and literature review in the field of HR and Consulting. The study shall provide key recommendations to be followed by the organizations to be able to drive disruptive growth in organizations and create an impact through technological innovations in, and through the HR industry.

Keywords: Up Skilling, Digital Era, Business Transformation, Technological Innovations, Disruptive Growth

Gone are the days when HR was known for the transactional elements which were required in an organization. HR now is looked at from a strategic lens to formulate the strategies of organization and has earned a seat in the board meetings for discussing strategies to enhance the business earnings. Through primary and secondary research, it has been observed that the HR three pillar model is being followed in the most of the leading MNC's today whereas it is yet to be started to follow in the upcoming start-ups due to dearth of workforce pertaining to the budgetary constraints. With the development in the economy and extensive research, companies have realized that investing in the people, is of the utmost importance to be ahead of the game. The erstwhile, role of HR from managing and storing the data seems to now see a shift towards utilisation of data to make important choices and decisions for the company. The value of the work of the Human resource departments now relies on the analysis and suggestions which they bring to the table leveraging the employee data and requirements through the multitude of roles performed by them including – recruitment, staffing, rewards management, performance management, trainings, etc.

In the Big Data era, how to effectively utilise the skills of the existing human resource managers and how to up skill

them to make better and effective decisions has been paid attention by abundant leaders, Multinationals, consultants and Scholars. With the retiring of baby boomers from the organizations and upsurge of millennial and heavy recruitment of GenZ- employees who expect the comforts of digital world at work-place, the HR needs to not only change the lifestyle for business but itself too. This paper shall give HR professionals a way of redefining their roles not just for their business but for themselves as well. This paper will be able to bring value to the people, who are interested in understanding how HR in their organizations can pivot to the new roles and how companies can realise the 'missing middle' to augment the future of their organizations.

I. Review of Literature

As the December 2015 Aon Hewitt Performance, Reward & Talent report – Reimagining HR for 2025 States that there is a seismic shift in the role of the HR observed towards 2025 where every aspect of the working of an HR would change with technology taking the lead in the upcoming change.

Areas where the changes are observed:

* HR Professional

Training & Learning

Learning now is expected to be bit-sized and available in a click with the extensive use and availability of mobile platforms, MOOCs (massive open online courses), cloud-based learning and development solutions. According to the UdeMy report “2020 Workplace Learning Trends Report: The Skills of the Future” Research suggests that In the past three years, Artificial Intelligence and data science skills have become the most wanted/hottest skills. With the advancing emphasis on continuous learning and up-skilling and a constraint on the spending budget for learning, HR is being challenged to bring an innovative solution towards maintaining the effectiveness of learning. The same is observed to be achieved through companies leveraging cloud- based learning platforms where employees can learn through each other and teach each other, post relevant articles and videos, etc. and learn while they are on the go or in their own leisure time, anywhere, anytime. Some of the leading multinationals are leveraging this, such as Accenture, a leading services company. (Stated in the book Pivot to the Future)

Performance management

Research states that, there have been employee concerns on poor quality of feedback, the negative effects of performance ratings, etc. This has pushed the HR to redesign and rethink of an innovative way of designing the performance management system and help deliver and receive feedback for their employees to keep up the employee morale and increase the transparency and trust in the system. HR has now moved towards coaching and mentoring leadership, team leaders and managers to conduct the performance reviews and discussions. The HR now helps coach the managers to have meaningful and forward looking conversations about the employee’s performance. Once the performance reviews are submitted by the team leaders, the team managers are then coached by the HR business partners to have total reward conversations as well. In order to keep all the information transparent, the information is housed on cloud-based platforms of the company, where the confidentiality is maintained as per the audience required.

Social Media and Engagement

Research suggests leading multinationals have created in-house social media platforms which are on the similar lines of leading social media platforms such as LinkedIn, Facebook, Blogger, etc. for employees to interact and get to know each other through the similar ideology. Employees are able to share their innovative ideas, blogs, posts and photos and like, comment or follow just like any other social media platform. They are able to share their professional and personal achievements and create a

time-line just like on Facebook/twitter. This keeps the employees glued to their company social media platforms and helps generate more bonding amongst the employees. This provides an opportunity for the companies to bring together employees from different geographies and create the sense of ‘one organization’. The content on these social media platforms also has a technological advantage, as it allows the analytics teams to analyse the kind of data being circulated, the employee morale, employee psychology, the employee desires, etc. This also serves as an opportunity for the HR practitioners to reach out to the employees through innovative social media campaigns - helping create awareness and launch contests about the company policies and code of conducts. I.e the HR can provide a gamified way of learning through circulating posts on the internal social media platforms of the companies.

Recruiting/Talent acquisition

With the growing use of technology, people are reliant on their cell phones. They feel more comfortable in viewing the job listings and applying for them from their mobile devices while they are on the go or in their comfortable spaces. Stating numbers, 80% of job seekers prefer to search about job openings on the cell phones, and out of those 80%, 70% of the population is willing to apply for the job roles from their cell phones. Talent sourcing has become an another medium of recruiting the candidates through a myriad of online sources such as the blog posts, leader profiles, social media profiles, social media groups, etc.

The traditional HR operating Model / The three pillar Model of HR

The three pillar model of HR has been observed in the research on Human resource development of Tencent which is also widely followed by the leading MNC’s today. This divides the HR department into three categories, HR business partner role, Human resource centre of expertise (COE) and Human resource shared service centre (HRSSC) also known as the operational wing of HR.

The 1990s observed “The War for Talent” and the initiation of technology and international mobility helped the HR function to find itself a seat at the C-suite table, help navigate the business and be a value addition partner. With the changes in the business, HR should not only re-asses the business environments but also its own roles and responsibilities, making itself future ready for the future workforce. Hence there has been a need to challenge and change the three pillar model observed, to adapt to the changing needs of the business environment.

There are a few challenges foreseen as stated below:

Challenges of the Three Pillar Model of HR



- **Quality V/S Cost:** While the HR three pillar model might have distinguished the operational role of the HR and parked it for the HR service delivery centres, the challenge of communication, language and ample amount of quality of customer service seems to be a deterrent and a challenge. The organizations seem to not have the allocated budget for such roles where the quality of work is not maintained.
- **Transaction V/s Strategy:** Transactional work for HR Business partners seems to be a deterrent to work efficiently and provide strategic inputs.
- **CoEs Expectation of Higher Control:** The synergy amongst the COEs and the HR business partners at times, seems to be missing as the COEs hope and expect to have a higher control over the strategic inputs and key initiatives brought in to the company through them.

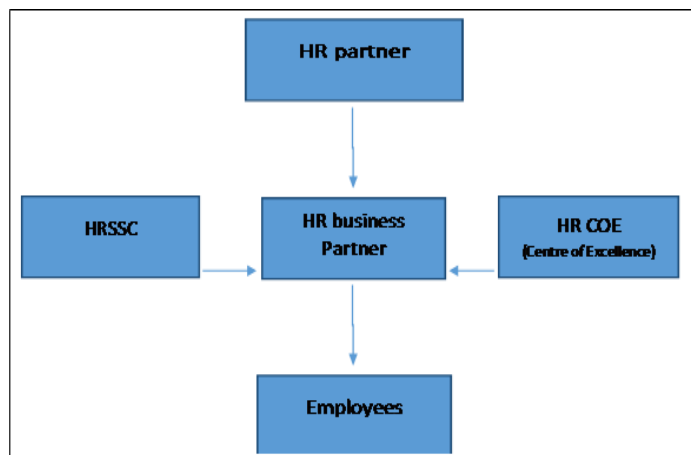
Solution by generation of new models

Companies such as AON Hewitt are helping its clients change HR models and orient them more towards the business needs where they help redesign the models depending on the company policies, vision & strategy and goals.

Expanded HR Competency Model

This model shall work in large sized organizations and it enhances the role of the HR where in addition to the Three-pillared model there is an HR partner who works at the central level. While there would be HR business partners available for each team of about 300-600 employees, there would also be an HR partner working at the central level who shall help design the employee engagement initiatives, surveys, etc. which shall then be leveraged by the HR business partners at the team level.

This model shall work well for large, global organizations and is already prevalent in large MNCs such as Deloitte, PwC, EY, Accenture, IBM, etc. which have several large locations where employee management is required.



Internal Consultant Model

In this model HR Business partners are embedded in the business. In this, HR professionals belonging to specific COEs are embedded as per the business and project requirements and help advice on incentive designs for instance sales incentive designs and talent management professionals helping in creating the training initiatives. This requires a high business acumen and knowledge of the employees and data.

Outsourcing or Creating an Agile Model

This model allows leveraging the HR professionals from several teams together for a project which would require work-force for a specific period of time. This is a win-win situation for the organization and the HR professional as the HR professionals get an opportunity to work on a project which is or might be out of their comfort zones and help enhance their learnings as well.

Digital Workforce & workplace– The concept

As explained in the white paper- 'Adopting the digital Workplace' by HR Zone, from time immemorial, work has often been pushed from top to bottom where control has played a major role; The Digital work-force is one where the team networks and works together on a platform to create innovative solutions and foster collaboration. The digital workplace is one which aims to get a higher output or enhance the effectiveness of the internal and external teams where they have a platform to collaborate, innovate and engage with each other. This fosters the 'anytime, anywhere' concept of working helping the workforce to deliver from their comforts harnessing their innovative mind sets.

Digital HR - The concept

Digital HR is the new face of HR which is ready for the upcoming changes in the business and market trends. Digital HR is one which sees employees at the heart of making decisions. It is possessing the ability to design human-centric engagements and initiatives which can impact and create value for the employees with the new changing roles. An important element of digital HR is to have the right amount of empathy and the right balance of human interaction with digital touches. For instance, applications on the smartphones which can help augment the employee engagement levels and interactions within them with one touch of a finger, nudges and prompts acting as human reminders. Thereby harnessing the use of technology to replace repeated tasks and to free the time required to focus on strategic elements of the personnel management.

Latest Trends and innovation in the HR industry

A latest term, “New work” concept synonymous to digital work spaces has been introduced where employees are said to be virtually connected and work more efficiently in a time and tech savvy manner. New technical advancement has paved the way for HR to create and evolve the HR management systems and thereby utilise newer ways such as:

- **HRIS and cloud based software to support operational HR activities:** First adopted in 1960s for aiding in the automation of payroll activities, HRIS was used to remove the dependencies on paper based work however with changing time, the HRIS has been being used for all recruitment activities, scheduling, staffing, payroll, leave management, etc. The needle is however now shifting towards cloud-based HR solutions and Software as a Service (SaaS) platforms in order to offer a better customer experience and efficient solutions.
- **Mobile based HR programs and solutions:** The integration of SaaS and cloud-based software has helped change the entire landscape of the HR programs. The social media flavour has become very prevalent in the in-company mobile applications and digital crowd are becoming increasingly dependent on mobile applications from managing their time, responding and typing emails to applying for jobs and checking the latest news on one’s organization.

Third Wave of Business transformation, How AI shall augment capabilities

Business transformation can be explained in three waves. Standardization of processes marked the first wave of

business transformation. Automation of process marked the second wave. The onset of creation of adaptive processes has marked the third wave i.e the birth of Artificial intelligence. This is when the Systems have started learning by themselves. The era where machines are helping us amplify our expertise by collaborating with us to achieve higher productive and efficiency and not replacing us. As stated in the book 'Human + Machine: Re-imagining work in the Age of AI' it has been explained, how AI shall augment the capabilities. For instance, companies today have moved towards using AI driven chat bots to replace the time spent on operational queries which are received by external and internal customers. Example: Accenture has an internal chat bot to save the time spent by the HR professional on answering regular queries, Kotak has a virtual assistant Chabot 'KEYA'.

The concept of Missing Middle

The book, Human + Machine, introduces the concept of Missing Middle which is defined as the gap between machines and humans which the companies should focus on fulfilling to achieve higher productivity embracing the role each of them has to play. It is the symbiotic relationship between the humans and machines where both complement each other and through which machines can help augment the human capabilities.

II. Research Design & Methods

The research methodology used in this paper is of descriptive research method.

Primary Research

The researcher has conducted interviews of employees in the age group of 21-37 years of one of the top tier services organization from the consulting and HR management backgrounds. The researcher has also conducted interviews of employees from the age group of 21-27 years from a number of start-ups and multinationals.

Secondary Research

The documentary method of research has been utilised in this paper which can be defined as the utilisation of outside sources, white papers of leading MNC’s, Published Point of views to support the viewpoint of the author. The researcher has carefully studied the published white papers, articles and Point of views published by some of the renowned mid-size and large size organizations and multinationals and research papers published by academicians as mentioned in the references section.

III. Results & Analysis

Analysis of the research has led to recommendations, they have arisen from researcher's personal experience and interviews held during the course of research coupled with the innovative techniques which can be adopted to carry forward the roles and responsibilities of an HR practitioner.

Attacking Isolation through the medium of technology

The HR department seems to become isolated as they are not a part of the business but key support to the business. It is imperative to keep the ongoing communication through the medium of technology. Through recorded videos, voice notes, Skype/ teams meetings/ video conferences, etc. It is imperative to have a 5-minute window to speak on internal meetings such as All hands meet, etc. to stay connected with the employees and the management for them to be aware of the engagement initiative.

Understanding the Business and disseminating information through the business rationale; Up skilling the HR

To effectively support the business, it is required to be able to deliver results through joined efforts. The decisions taken by HR is through following the key policies, procedures and legal elements to be able to safeguard the organization as well as its employees. However, in order to be able to explain the decisions of the HR, it is imperative to partner with the business i.e. align the decisions with the vision of the business it is supporting. This is where Training the HR for effective communication and partnering comes into effect. The HR often knows why a certain decision such as paying overtime or increasing the insurance premiums or rewarding a not-performing employees with a strict action is necessary however, the HR practitioners are unable to effectively communicate and sell the idea to the business as they are unable to align their decision outcomes with the business strategy and vision. It is suggested that HR is continuously trained to develop those soft skills and encouraged to be an active part of the business meetings to understand the same. The HR should be trained in understanding and applying HR analytics to be able to showcase sound decisions to the business. Training in HR analytics through internal certified practitioners or external stakeholders should be made available to the HR professionals.

Innovative career models for supporting the Journey from Baby Boomers to Millennial & GenZ-

This is a workforce change which is compelling the HR to re-think and re-invent, to achieve disruptive growth

and technological advancements. Companies are pivoting towards hiring younger generation who are used to achieve faster growth and faster results. This shall compel the HR to re-invent and rethink of how to keep the employees more engaged and help achieve faster results in their career. HR should be able to design and develop new and innovative career paths and models, targeted capability development, and innovative ways of retaining and engaging the new demographic of workers. The Practitioners showcasing the knowledge of the most relevant skills and the ability to apply the knowledge should be rewarded. A clarity of the career progression with parameters of assessment should be provided to the new generation employees. This shall make the performance management systems more transparent and tangible for the employees to be able to understand and connect with the talent rewards.

Rethink & Re-innovate Rewards

With the changing work-force, the mannerism of rewarding them would also need to be changed in order to be able to retain and reward the best talent. The talent which is able to up-skill themselves and perform and apply the new in demand technologies at work should be rewarded and retained in the organization.

Safeguarding from data breaches

With Data becoming one of the biggest assets for a company. HR would need to think of innovative ideas in partnerships with technical and legal teams to safeguard the company data and maintain the utility for effective decision making. Heavy encryption and block-chain technology can be utilised to safeguard and secure the employee data in companies.

Timely Talent scouting and maintaining a talent repository

HR should be able to identify the capability requirements of the organizations which shall erupt in the near future with the changing business trends and project requirements. For this the HR would need to be closely aligned with the business priorities and keep a repository of the already available talent and skills in the organization. The suggestion is to utilise a cloud-based software to save that data and utilise the same while making staffing decisions. Thereby creating an internal talent marketplace. Through machine learning and analytics techniques, the employee data should be able to help the staffing specialists understand about the available workforce i.e. on bench vis some vis the projects availability at any point of time. Presently, companies are leveraging manual effort to make such data which can be replaced by the newer technologies to make the work

faster and easier leaving more room for staffing specialists to make strategic decisions based on the available data.

Game-Based and hassle-free New joiner orientations

New joiner orientations can be made more engaging, relevant and hassle-free if the documents submitted by an employee are stored in a cloud-based software with the employee and HR being able to access and renew it from time to time. This shall help in faster and quicker background verification checks. To make the new joiner orientations more relevant, it is suggested that HR trains and mentors the business executives from the new joiners' teams to help them understand and orient towards in the new organizations. HR could automate the details provided from the HR perspective through a series of videos and interactive online games which the employees can play to understand and engage himself/ herself thereby remember the details at a deeper level.

HR impacting the role and image of Artificial Intelligence

Artificial intelligence is being widely used by organizations today in some way or the other and it has created a deep seated fear in the mind of professionals that it shall be replacing jobs. It is crucial for the HR professionals to understand the importance of AI and brainstorm on how to leverage AI to create new jobs and transform careers. HR should build a strategy where Artificial intelligence can enhance the employee experience by partnering with internal department such as employer branding, corporate communications and Information Technology.

- **Generating curiosity:** HR should generate curiosity amongst the employees to avoid the fear in the mind of employees. The HR should be able to identify a strategy to position AI to improve productivity rather than displacing jobs.
- **Generating a sense of reason:** For the HR and the business, it is important to understand and disseminate the sense of reason or the why of doing what one is doing. It is important that HR first understands the importance and the positives of AI required for a business to run and how business can be made more efficient. How probably artificial intelligence could help hire faster. The HR should be able to answer questions such as if it is it to hire better and brighter talent or is it to generate better roles for the talent existing in the company. If the business reason could be to understand the learning opportunities required to be created for the existing talent, etc.

- **Be Data Ready to tie the reason to business vision:** It is crucial for HR to partner and understand from various stakeholders in the organization from different backgrounds, departments and expertise who share the vision of delivering a business solution using Artificial Intelligence. Hence playing the role of bringing together different stakeholders to one single platform and perform the role of a coach to mentor and educate on the importance of AI. Communication when transparent and instils the trust is impactful. It is important that the employees of an organization are made well aware of the benefits of AI, mentored and coached on how to leverage their skills along with the areas which machines can achieve. They should be ready and embrace the change and visualize how automation can help them achieve removal of the transactional chores. HR needs to understand and identify the fear amongst the employees and be the effective change agent to instil the thirst to learn and embrace the new techniques of working.

Here is some recommendation for organisations to create effective Digital HR and up skilling the HR.

Create internal training and brainstorming competitions such as HR Hackathons

Since it is important to be ahead of the business in thinking innovative solutions to engage them, HR should indulge in creating opportunities of hackathons to brainstorm innovative solutions which can then be implemented with the help of partnering with the internal teams such as IT, legal, employee branding etc. for the employees of the organization for instance generating new and innovative solutions and out of the box thinking for engaging employees, performance management. The events should follow up with internal recognition elements to keep the morale high of the Human resource executives.

Business stints for Human resource executives

Leverage the internal consultant model as explained in this paper, HR in organizations should be encouraged to work and learn along with the business executives from not just the teams they are supporting but also the teams which their peers might be supporting to stay up to date and take holistic decisions while thinking of solutions towards problems in their own respective teams.

Higher ownership level

HR should be bestowed upon with higher ownership to generate subsequent roadmaps to augment the capabilities of the business by utilising technology. This should be

one of the parameters in judging their performance. HR should think of disrupting their roles and put innovation at the centre to increase productivity.

Encourage evidence based thinking

Following the Gut Feeling and past experiences seems to be bottom line of several decisions in the HR space. While the decisions in HR cannot be taken as absolutes however, the HR should be encouraged to move towards evidence based thinking and solutions utilising and leveraging the data from the past experiences.

IV. Conclusion

Through this paper, it has been concluded that with the ever-changing business trends and the complexity of both humans and the business market, machines are predictable. Machines can be programmed to follow certain rules and algorithms and leveraged to alter the time taken to do a job for lesser amount of time and make the organizations more productive. Changing techniques of working has created a fear in the mind of employees and the issue can be tackled by the role of HR playing successful change agents generating enough awareness, understanding the missing middle and communicating and mentoring the employees of the organization. Through literature review, researcher has introduced the concept of erstwhile three-pillared HR concept, the challenges of the same and the proposed solutions through the three new models which can be utilised in the companies today with the changing business trends, the concept of digital workplace, digital HR and latest trends in the HR industry has been studied. It has been concluded that the Human resource department needs to be up skilled utilise, HR analytics and understand the importance of new techniques prior to be able to disseminate the information further. There have been recommendations made on how to achieve the innovation in and through the HR industry in addition to the already available HR innovations through the researcher's personal experience as an HR professional and primary research, it has also been recommended how effective Digital HR can be created and sustained in an organization to increase the productivity levels and manage the changing present business scenario.

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A Book Review On “Incognito: The Secret Lives Of The Brain”

Author: David Eagleman

Publisher: Vintage; Reprint Edition

P-ISBN: 978-0307389923

Year of Publication: 2012

Price: 1133/- INR

Brajendra Kumar*

"In general, we're least aware of what our minds do best." — Marvin Minsky, *The Society of Mind*

We all take interest in secret of our friends, family members even in professional life and are always surprised to know about it and find **surprising**, amazing, dramatic and even sometimes unexpected aspects of our life. The main thing known about secrets is that keeping them is unhealthy for the brain. Now can we think about secret lives of the brain? In this book “Incognito: The Secret Lives of the Brain” author has discovered that this brain is ultimate and has no limitations. This book **changes everything to everyone and discovers** how everyone is amazing just because of how they act. Author is an American neuroscientist who has played with brain and discovered secret of brains through many real examples. Author has explained zero to million about brain that say “There is someone in my head but it is not me”. He is defining so much about brain works and how it changes our perception about how people act. There are so many examples which show how things changes and we do not have control over brain. This book contains every subject even it is on neuroscience but for few readers it requires to be read at least two or three times. “The testimony of the senses: What is experience really like” define regarding awareness of illusion? You will be able to understand that we do not perceive what is out there but whatever your brain tells you and accordingly you will be able to understand how you are seeing with the brain. Seeing with the brain will not work until we learn about the brain. This book **is on neuroscience and** has been explained magnificently. **Writing** style is amazing and if I say it is combination of science and philosophy. A well-researched with references **have** been **explained** and very suitable for the intended audience. Many ideas have been explored and are able to convince people through examples. I understand people can get most of the answers about their thoughts. There are many stories, examples, models; puzzles have been floored to examine and understand, science, technique, brain damage, dating, drugs, beauty, synesthesia, illusions, criminal laws and many more. This book is for students, academic, engineer, scientist, academic, doctor and helps in understanding of brain work. The purpose of this book to understand a brain of people but we all know that is not easy at all. The author has explained **C**onscious and unconscious processes of our brains very well. This book also advocates for a social and justice system that disregards civil rights. I agree with author’s point of view but I also see many changes as lot of scientific

and technical terminology have come into notice that are also changing the people’s mindset so there is no end result. This book has been organized very well. The main ideas of this book are to explore brain work and mindset of people in various manners. It has much review of literatures and in every chapter it shows how authors have thought very deeply and welcomed a sense of people behaviour. You do not perceive what's out there. You perceive what-ever your brain tells you. The chapter “Mind the Gap” defines how there is a gap between knowledge and awareness. You know how temporary tickling of the brain and the effects of previous exposure has different result. Now in next chapter you find “The Kinds of Thoughts That Are Thinkable” **and I** understood the meaning of synesthesia that highlights the amazing differences in how individuals see the world. **synesthesia** is a fusion of different sensory perceptions. In the chapter “The Brain Is a Team of rivals deliver” author explains how brain is best understood as a team of rivals and also how we can understand that whether we are aware of most of what surrounds us, we need to think again. In the next chapter “Why Blame worthiness is the Wrong Question? We know how small change in the balance of brain chemistry can cause large changes in people’s behaviour. People don’t act and arrive at the scene with the same purpose their genetics and personal histories mold their brains to quite different end points. The chapter, “Life after the Monarchy” claims that conscious mind is not the one who is driving the boat. In the chapter it has been found that brain is a system and it is governed by the law of chemistry and physics. Then it also asks do we have a soul that separate from our physical biology or we are simply in biological networks? This law has results that all our hopes, thoughts, dreams, passions, emotions and decisions are produced by natural reaction. After reading this book, my personal experience has changed. It has made me more curious about my thought. I have known why people behave the way they do and why we have no control over them. I personally enjoyed this book and I am amazed how well Mr. David has explored and made interesting. I highly recommend it to other readers and hope it gets wide publicity.

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A Book Review On “The Anatomy of Cloud Computing”

Author: C. S. V. Murthy

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In this world of dynamism, hyper-competition, disruption and in-tech approach, cloud computing is taking a boom. Now entire processing of business operations is done online for 24x7 operability, real time analysis, easy accessibility, flexibility, storage and scalability. Cloud in simple terms is a network of networks enabling remote access to a set of decentralized resources of IT. It is an approach where a company can host its database, storage solutions, platforms, software solutions and even entire infrastructure on a virtual server and provide secured and authenticated access to it. It enables to move entire business online where a company can have no office but yet can reap attractive returns and revenue. In return, they need to pay subscription fee as per usage of services. There are many cloud vendors available in the market providing end-to-end solutions to their clients like Amazon Web Service (AWS), IBM Cloud Hosting, Microsoft Azure, Salesforce, Oracle, Google Cloud Platform, VMware, Adobe Creative Cloud, Rackspace, SAP etc. The book “The Anatomy of Cloud Computing” by C. S. V Murthy is an informative book that describes various facets of cloud related to on-demand capacity fulfillment, on-demand storage, servers for web applications and effective business decisions. Cloud enables hosting of computing services through servers, database, storage, networking solutions, software, analytics and many more. The book revolves around cloud hosting landscape with a special emphasis on utilization of the cloud by online companies. Cloud is the most promising option for not only large vendors but even for small start-ups who are leveraging the potential of storage solutions, developing new applications and are thus mending money. Apps like Paytm, Mobikwik, PayU Money started as small ventures and now have established their remarkable presence in online domain having a standout performance in delivery of hosted services over the Internet. The book also explains usage of different types of clouds by the companies-private, public, community and hybrid using IaaS, PaaS, SaaS and CaaS. Cloud enables various online services like music, games, documents editing, sending e-mails, watching movies, storing pictures and files etc. However, there are many challenges associated with cloud related to data privacy, security, recovery, availability, management capabilities, regulatory and compliance restrictions. The book is divided into thirteen chapters. Chapter 1 describes the basics and concepts of

cloud computing with number of examples. Chapter 2 deals with major services provided by Cloud- Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). Chapter 3 explains Containers as a Service (CaaS), micro services and Docker. In Chapter 4, other cloud computing services like Identity as a Service (IDaaS), Federated Identity Management (FIDM), and Network Functional Virtualization (NFV) etc. are explained. Chapter 5 deals with different Cloud Models providing service and deployment solutions. Chapter 6 discusses concerns from consumers and technological point of view and future generation of Cloud Computing systems. In Chapter 7, author has dealt with challenges, security and applications of cloud. Chapter 8 deals with Native computing of cloud and cloud migration. In Chapter 9 cloud computing providers, Internet of Things (IoT) and Service oriented Architecture is discussed. Chapter 10 deals with software development process of Monolithic Application and Micro Services Architecture. In Chapter 11 author has explained Mobile Cloud Computing (MCC) and its advantages for instant connect and reach to the customers. Chapter 12 and 13 clearly explains the role of machine learning, business analytics, enterprise integration, M-commerce, bit coin, block chain, mobile and disaster recovery in cloud computing. The author of the book is highly knowledgeable and has immense experience of public sector projects. His books are very popular as they are full of practical examples and case lets from the corporate world. The illustrations, statistics and cloud dictionary used in the book are very impactful and easy to understand. The book is very well structured as a self-teaching guide. I believe that this book will be very helpful for researchers, students, academicians and corporate people to get information on all aspects of Cloud Computing and utilize it effectively in their respective domains as it is the need and future of organizations for enabling convenient, ubiquitous and on-demand network access to a shared pool of configurable computing resources. There is an immense scope of research in Cloud in the field of energy optimization, load balancing, security and integrity, hybrid functionality, visualisation, and data segregation and recovery.

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