

IJMIR

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Issues and Research

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**S-9, IInd Floor Above Federal Bank,  
Plot No-5, Sector-5, Dwarka, New Delhi- 110075,  
Phone: - + (91)-9892508945  
Email : [sales@enrichedpublications.com](mailto:sales@enrichedpublications.com)  
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# IJMIR

## International Journal of Management Issues and Research

### **Aim and Scope**

#### **AIM**

International Journal of Management Issues and Research (IJMIR) is a refereed journal published by the School of Business Studies, Sharda University. It is an academic and a peer reviewed International Journal.

The Journal aims to:

- Disseminate original, theoretical, or applied research in the field of management and its allied areas.
- Publish original, industry-relevant research to reduce the academia-industry gap.
- Seek original, unpublished research based on theory, empirical analysis as well as experimental works for publication.
- Publish strong research in the field of Commerce & Finance, Sales and Marketing, HR and OB, Business Communication, Operations and SCM, IT & Business Analytics as part of Management as a field of Study and also in Healthcare management, as well as other interdisciplinary fields of management.

#### **SCOPE**

The scope of International Journal of Management Issues and Research (IJMIR) includes all domains that are listed above and wishes to include emerging themes and action-oriented research. The journal also welcomes focused discussions, cases, monographs and interview papers, and book reviews.

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**Message From Editor-in-Chief :**

Greetings of the day from School of Business Studies!

It is my privilege to present to you the latest Edition of our Journal (IJMIR, Volume 9, Issue 2, Year 2020) from School of Business Studies, Sharda University. A collective effort of editors, publishers, reviewers and authors brings out this open accessed, peer-reviewed, scientific research journal. This journal serves as a platform for sharing knowledge in the field of management to the researchers, students and readers.

This pandemic period has created serious challenges to each and everyone in our academic community. We will see major transformation in industry and education sector while the things will be different with “New Normal”. In this context, continuous research on different aspect of management will become imperative.

The current issue, Volume 9, Issue 2 includes articles, research papers, and case studies from different field of management to serve researchers, academicians and practitioners. The articles vary in terms of context and content, and our editorial team has tried to amalgamate different thoughts and inputs received from the scholars in this edition. We have also added a section “Perspective” where people from corporate and academics have shared their views and opinions.

I would like to thank the editorial team and reviewers' team, authors as well as publishers and team members for their contribution. Editors welcome all constructive criticism as well as suggestions to improve the quality of the journal.

**Best Wishes,**

**Prof. (Dr) Subir Ranjan Das**  
**Dean, School of Business Studies**  
**Sharda University**

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## **Message from the Chairperson – Editorial Committee**

Dear All,

COVID-19 has been now well documented and researched and everybody on this planet is aware about its consequences. All things where face to face interaction was needed was impacted but one thing that definitely undertook a new journey and renovated itself completely is education. The classes which were so indispensable for teaching learning process initially were worst hit. We were all in disbelief and there was no respite in sight, only some temporary means to minimise the loss of academic learning.

But one thing was going on continuously and that is the writing work and research work by all in our academic fraternity. It is no surprise that maximum number of articles were published during last 7 -8 months. It also opened doors for new research avenues.

Our Journal committee members were also continuously working to see that we continue to seek good quality papers and keep publishing in IJMIR. I am happy to share with you that this year Edition of our International Journal of Management Issues and Research, Volume 9, Issue No. 2, July to Dec -2020 is ready and will soon be in your hands.

This edition focussed on the variety of the themes which is an endeavour to present varied ideas and researches in management. While the articles themes are in HR and marketing, it is the perspectives section which presents an interesting research in various areas and what do authors think is happening in these areas. I hope you find them interesting.

Our sincere thanks to all the contributors for their continued support and interest. I also thank all the Journal committee members for their time and energy to review the articles and to select them.

We again request all academicians, researchers and practitioners to send their unpublished articles and papers for publication in our Journal.

Best regards,

**Dr. Manmohan Rahul, Professor**

**School of Business Studies**

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**Can be reached at : [editorsbsjournal@sharda.ac.in](mailto:editorsbsjournal@sharda.ac.in)**

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**(Volume No. 9, Issue No. 2, July - December 2020)**

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# Customer Engagement Marketing Metrics: Review & Propositions

**Saurabh Singhal**

Ph.D. Working Professional 2020 Student IIM Shillong

saurabh.phd20@iimshillong.ac.in

## **ABSTRACT**

*The concept of customer engagement is emerging in the marketing literature as previous research indicates that the customers remain more loyal to brands when they feel connected with the firm either through task-based or experiential engagement. The firms can also make good business performance if they leverage customer resources (network, influence, creativity and knowledge). This paper's motivation is to conduct a literature review and develop a concept on customer engagement explaining the various factors as Hollebeek (2011) has also highlighted that customer engagement is robust and will influence loyalty outcomes.*

*In this literature review, a conceptual model is defined, which covers various factors and constructs.*

**Key Words:** *Customer engagement, Marketing metrics*

## **Introduction**

Current evolving trend reflects the transfer of control to customers. Of late, we have been hearing that customers have greater influence over the firm's strategy which is classified as Earned Media (Part of POEM framework - Paid, Owned, and Earned Media). As firms are trying to gain more and more insights from customers due to which customers are also experiencing the change from task-based to experiential engagement marketing and this paper makes an attempt to highlight the impact which customer insights could make on company's future strategy, determining the customer offerings in terms of discounts, price promotions and in driving the marketing campaigns.

This paper explains the importance and contribution of customers in various aspects in terms of customer resources, customer network, customer influence and customer creativity which could also be tapped in terms of co-creation of products and offerings. This paper will also briefly touch upon the type of consumers, like the ones who are always seeking more variety (due to brand burnout/brand related fatigue), the ones who are activists, and those who are loyal to the firm.

## **HYPOTHESES & CONCEPTUAL MODEL**

**H1:** Product offerings and marketing communications impact customer engagement and hence brand loyalty

**H1<sub>A</sub>:** Better customer understanding will help a firm in improving its product offerings

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**H1<sub>B</sub>:** Customer behavior data will influence the development of relevant ads

**H1<sub>C</sub>:** Customer insights will help in achieving profitable customer relationships

**H1<sub>D</sub>:** Customer insights help in developing data-driven decision-making culture in an organization and improves market orientation

**H2:** Customer engagement is independent of price promotions

**H2<sub>A</sub>:** Successful development of customer relationship will influence customer engagement

**H2<sub>B</sub>:** Increased understanding of customers enables a firm to have a relevant pricing strategy

**H3:** Usage of the firm's resources to achieve superior customer engagement

**H3<sub>A</sub>:** Leveraging marketing resources to build market knowledge will improve the firm's business decisions

### Major Mediating Construct between H1 & H2

Due to digital penetration, firms can generate customer insights in real-time impacting product offerings, price promotions, and marketing communications.

### Conceptual Model



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## **Important Terms**

- 1) Inside-out marketing capability (Varadarajan 2020)
- 2) Outside-in marketing capability (Varadarajan 2020)
- 3) Network externality theory (Katz and Shapiro, 1986)
- 4) Marketing Program Implementation (MPI) (Lee et al. 2011)

## **CONTRIBUTION OF CUSTOMER RESOURCES**

### **Customer Insights & Knowledge**

When a business organization aligns its marketing goals with generating customer insights and intends to use the developed knowledge for making business decisions, it is worth noticing that customer insights shall play a central role in all the constructs at the organization, mentions Varadarajan,(2020).

Those firms that demonstrate the intent to develop and leverage the capacity to harness market intelligence's power related to current and potential customers and competitors will be called market-oriented firms. Varadarajan (2020) emphasizes the importance of understanding customers' needs and preferences and competitors' strengths and weaknesses.

During this journey of understanding customers, an organization creates knowledge and, in this course, utilizes its analytics and information analysis capabilities, and it helps in the creation of a knowledge-based view (KBV) of the organization, which is the core of a firm's competitiveness. The way an organization exploits customer knowledge measures the persistence of an organization's performance and creates a metric to measure new sources of revenues.

There is an interdependency as marketing performance gets better due to customer insights, which will increase the customer base and market share rather than improve customer information assets.

Lee et al. (2011) explain the resource-based view (RBV) of organizations as these resources contribute to firm success by demonstrating dynamic capabilities and implementing strategic actions.

Firms need to have more amount of awareness and information about their customers. That will increase their ability to recognize potential opportunities, re-align their marketing programs, cater to unmet customer needs in a more informed manner than their competitors, and help achieve their full potential by getting tangible & commercial benefits.

Kunz et al. (2017) emphasize the need to develop customer knowledge based on customer insights. Business organizations require deeper customer engagement, as it is also needed from the business to create the ability to churn and analyze the volume of data it brings to the table. As the data shall originate from various customer-facing channels and data will comprise customer engagement history,

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preferences, profile & identity, a trend of their decision-making, and overall behavior. preferences, profile & identity, a trend of their decision-making, and overall behavior.

### **Customer Networks**

The bigger the network size, the more the customers are connected with their associated brands. The customer network results in a better connection with each other. And they share common bonds due to similar geographical location, personal choices, and extreme brand loyalty and develop an exhaustive & strong association with admired firms resulting in more benefits for the brand.

In his paper, Lee et al. (2011) explain that customers believe they can get more benefits from the firm if the customer network size increases, which results in a positive feeling toward the firm and its brands. For Example, Unilever's extensive customer network provides both a communication method and an opportunity for connections among customers while also providing the company with an additional customer resource.

### **H2<sub>A</sub>: *Successful development of customer relationship will influence customer engagement***

Lee et al. (2011) mention that Marketing Program Implementation (MPI) reflects an organization's capacity to leverage its resources to take actions based on derived customer insights, network, creativity, and knowledge and subsequently influence its business performance.

The relationship with the customer is required to be built, nurtured & maintained; it gives the advantage to acquire customer resources (knowledge, network, influence & creativity) and improve the design of marketing programs and achieve impactful customer engagement. And in the long term, one could see the dynamic capability of Marketing Program Implementation (MPI) in terms of business performance.

One could gauge customers' engagement with a specific brand through activity levels (behavioral, cognitive, and emotional) in their direct brand interactions reflecting their enthusiastic, motivated, and engagement dependent state of mind Hollebeek (2011).

### **H3: Usage of the firm's resources to achieve superior customer engagement**

Various firms' resources can be of use in engaging customers, as Sim & Plewa (2017) explained in their work that the firm should leverage all the crucial touchpoints to ensure that continuous interactions beyond purchases are maintained. Business organizations could achieve the mentioned goal through the integration of multiple virtual and physical interaction points to extend the interactions not just between the firm and its customers but also to empower customers to interact with other customers of the same firm and contribute in terms of their resources (Customer knowledge, creativity, network & influence).

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As per Sim & Plewa (2017), Customer Engagement derives an emotional connection that acts as a catalyst of behaviors and relationship-building skills between the brand and customer for developing long-term relationships.

Customer Engagement focuses on the focal object and subject, while the focal item can differ in various approaches or contexts. For example, if the research is on students, the focal object will be on students while the focal object will be considered a brand in the customer engagement studies.

The roots of customer engagement are annotated as unidimensional or a multi-dimensional approach. The unidimensional process is built on a single dimension and is very smooth and transparent. Simultaneously, the multi-dimensional approach shall be for overall emotional, affective, physical, and behavioral dimensions.

Sashi (2012) mentions that maintaining a sustaining relationship with the customer is required, ensuring an intimate bond between firm and consumer. And the direct visible benefit of this shall be customer willingness to make buying decisions, preferably taking the lead and coming ahead and creating value together.

There is a fragile line between the firm's roles and the customer in such circumstances, and they both at times converge their parts to create value.

As per Sashi (2012), the internet and web have played an essential role in developing a unique marketing mix, leveraging modern collaboration tools and technologies to understand customers' needs better and serve them efficiently.

In the research paper, Sashi (2012) has also explained that a typical customer engagement cycle will help create a good bond with customers and influence their buying behavior. The complete customer engagement cycle will comprise various stages like connection, interaction, satisfaction, retention, commitment, advocacy, and engagement.

These days to achieve internet-driven programs and engage a more significant number of customers, firms invest more in online programs. The direct metric to measure customer engagement programs' success shall be through the volume of sales, footfalls & hits on the company's portal, willingness to give and serve as customer references, and overall results of customer satisfaction surveys.

### **Customer Influence**

It is required to achieve a superior customer influence in customer's affective states, traits, resources, and goals as mentioned by Islam and Rahman (2016).

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As business organizations need to focus on customer satisfaction, involvement and trust and their perceived benefits in terms of cost and relationship quality to address their perceptual needs.

### **Customer Creativity**

Kunz et al. (2017) mention that customer engagement with a behavioral focus recognizes that consumers carry out several company-related behaviors that did not exist a decade ago. This type of customer engagement is directly related to the emergence of new media and all the new ways in which customers can interact with companies, including purchase and non-purchase behavior.

In their work, Islam and Rahman (2016) finds out that customers contribute to a firm's performance through their creativity and are not just receiving brand-marketing campaigns. Instead, they are adding value through their creativity in all their brand interactions. Creative customers make customer engagement highly interactive.

### **CONCLUSION**

Three sub-hypotheses within H1 are in alignment, and one of it was not found suitable as per the limited literature considered for this study.

#### **H1<sub>b</sub>: Customer behavior data will influence the development of relevant ads**

The story of brand ads had no significant connection, which could be justified based on customer behavior data. This study indicates support for H1<sub>A</sub>, H1<sub>C</sub>, and H1<sub>D</sub> but non acceptance of H1<sub>B</sub>

#### **Future Research & Further Implication**

As part of this literature survey, would like to share deductive reasoning by mentioning that there is a growing interest in marketing on the concept of customer engagement (brand-engagement) and it is still in the infancy stage, and there is scope for further research as per Hollebeek (2011)

As part of this literature survey, I would like to share deductive reasoning by mentioning that there is a growing interest in marketing on the concept of customer engagement (brand-engagement) and it is still in the infancy stage, and there is scope for further research as per Hollebeek (2011).

Customer Engagement is suitable for a brand and organization as it shares a positive & linear relationship with business performance. However, I would like to share my inducting reasoning by sharing how Hollebeek (2011) relates the concept of 'occupational burnout' with excessive engagement levels and advises to exercise caution.

The highly engaged and loyal customers shall be termed as 'activists' as the firm shall always retain them in the customer base. There shall be another type of customers within this set of highly engaged

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customers who will tend to switch the brand as they seek variety (also known as 'variety seekers'). And it is like the concept of 'brand burnout' as discussed above and is caused due to 'brand-related fatigue', mentions Hollebeek (2011). These are the two implications from the researcher's perspective and the practitioner's point of view.

As per Kunz et al. (2017), many firms struggle to achieve expected business performance and desired financial success, considering that customer engagement is the key driver.

The primary reason could be that there has only been a firm-centric approach rather than a customer's perspective. The disadvantage was that only the customers' positive and negative expressions were related to the company and its aligned benefits. In contrast, the effects on individual customers were ignored, which resulted in a lack of customer focus. Hence, the firms are finding it challenging to leverage the results of customer engagement opportunities, and there is further scope of research in this area to find out the other reasons for the same. I want to conclude by sharing my understanding that there is no consensus in the extant literature on the definition of customer engagement, and, hence, there is further scope of research on this vastly used, but often misunderstood term.

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# Evidences of Gender Diversity on Investment Preference

**Dr. Shilpa Bahl<sup>1</sup>, Sunil Kumar<sup>2</sup>, Dr. Shuchita Singh<sup>3</sup>**

<sup>1</sup>Associate Professor, Galgotias University, Greater Noida

<sup>2</sup>Assistant Professor, Amity University, Greater Noida

<sup>3</sup>Associate Professor, G.L Bajaj institute of Management and Research, Greater Noida

## **ABSTRACT**

*The main aim of this paper is to study the impact of investment preference on gender with the help of four biases i.e. overconfidence, conservatism, self attribution and self control bias. To examine the hypotheses, the primary data collected from 350 samples. The samples were chosen randomly from the population who invest in funds. To measure the dimensions of biases a fivepoint scale of strongly disagree to strongly agree was used and Analysis of Variance (ANOVA) as statistical test was applied to test the significant difference between the Gender and the biases. The result shows that women are less overconfident and more risk averse than men. The study also reveals that women have self attribution and self control bias in them.*

**Keywords: Behavioral finance, Bias, Conservatism, Gender, Investment, Overconfidence, Empirical Study.**

## **INTRODUCTION**

Traditional theories of finance and economic models are depends on the two vital assumption, that is, market efficiency and rationality. The traditional finance assumption says that human beings are rational who always want to maximize their wealth. In the words of Fama (1965), he defines that “efficient market” as a market in which “security prices gives the full and free information to the all available investors in the market”. “He also tells that investors are of rational nature who wants to maximize their profit by predicting future values of individual investors”. Behavioral finance is an approach that continuously challenges the assumption of Efficient market hypothesis and consider that several factors which includes both irrational and rational thinking, who force the behavior of investors. (Shefrin, 2000). The theory of behavioral finance believes that only the rational behavior and market prices of securities are not all the time a true estimation of the fundamental value of the firm, it also focuses on investor behavior and their investment decision process which drive the market prices of security and fundamental value of firm. Many research theories and readings on the behavior of investors have revealed the subsistence of irrational thinking in investor’s decision making abilities. Many behavioral researchers study the behavior of investors and enlightened the reason, why the shares in the market are over and undervalued?

The paper Statman, M. (1995). “Behavioral Finance vs. Standard Finance tells about the distinction between standard finance and behavioral finance, Professor Brad Barber and Terrance Odean (2001), conclude in the paper as “Boys will be boys:- Gender, Overconfidence and Common Stock

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Investment” , Amos Tversky and Daniel Kahneman , propounded a theory naming “Prospect Theory”, Engin Demirel et al. (2011), he analyzes the relationship among financial and demographic behavioral factors in investment decisions, Hussein A. Hassan Al- Tamimi, (2006) analyze the UAE investor behavior and the factors influencing in “Dubai Financial Market and Abu Dubai Securities Markets”. He found six factors which have significant affect on investors.

## OBJECTIVE OF THE STUDY

- 1.ow men and To find out whether the gender diversity plays an important role in influencing investment decision.
2. H women investor’s are influenced by behavioural bias?

## LITERATURE REVIEW

**Barber and Odean (2001)** from their research they conclude that women are less overconfident as compare to men, as trading is more by them but earn less returns in USA.

**Chen et al. (2007)** conduct a survey on the China stock market and discover that many investor’s are exaggerated by the disposition bias.

**From the study of Barber and Odean (2008)** it has show that in US stock exchanges investors opt that type of stock which have recently attract their attention while making purchase decisions confirming the availability bias.

**Park et al. (2010)** from their study in Korea they showed that there is a significant relation between investors choice and confirmation bias, which shows that investors get overconfident while making investment and negatively affect their investments.

**Fish (2012)** from his studies in USA, he conclude that males take more risk than females, when even they are taking financial knowledge in consideration.

**Mishra and Metilda (2015)** the result shown from their studies that men has higher overconfidence as contrast to women, which is also exaggerated by investment experience and education. It also shows that there is noteworthy relationship between self-attribution and overconfidence.

**Dittrich, Guth & Maciejovsky (2001)** from their study they have conclude that at least one third of the investors are overconfident in favor of their investment. And they also found that the investors become more confident when they lose their money in the market. Due to overconfidence nature of investors they overrate their knowledge which makes a trend of unnecessary trading in the market.

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**Felton, Gibson, and Sanbonmatsu (2003)**, from their study they have concluded that optimist investor is connected with larger compliance to accept more levels of risk in a portfolio. They also analyze the effect of gender on the investment preference with one more factor who affects the choice of investment is personality of an investor.

**Kahneman and Riepe (1998)**, “from their study they want to found out the cause of over confidence and its affect on the investors. He argues that when people overrate their knowledge, undervalue their risk and overrate their skill to manage event, they suffer from overconfidence bias”.

**Eastwood and Nutt (1999)**, “investigate that individuals have a tendency to overestimate the optimistic news and underestimate the pessimistic news. They also conclude that the behavior is constant with those people who analytically responding in an optimistic manner.”

**Robert Durand, Rick Newby, Kevin Tant and Sirimon Trepongkaruna (2013)**, “the main aim of this manuscript is to check the behaviour qualities in financial market and main focus is given on overconfidence and overreaction, to check the personality traits they use the Big five personality model and researchers found that personality traits are correlated with overconfidence and overreaction in financial market.”

### **Investors' biases**

**Shefrin (2007) according to him bias is a tendency towards inaccuracy:** This is discrimination or a predisposition to formulate decisions which has been already inclined by an essential conviction. Many Psychologists have studied about the different types of error which investors make while taking decision on investments. This study also highlight that many investors are affected by psychosomatic factor for example herd bias, cognitive biases while making their decision, and don't consider the rational and wealth maximizing behavior. (Forbes, 2009).

In this paper author wants to analyze the experience of investment, gender bias, and the education level on two define biases, over confidence and optimism. This paper also studies regarding the association between over confidence bias and optimism bias. We can splinter this paper in the subsequent order. The first portion of this paper express about the overconfidence bias, Conservatism Bias, Self attribution bias, Self Control bias with their repercussion to the investors'. The second portion is go along by a assessment of former papers which are presenting the impact of gender, experience, and education level on over confidence and Conservatism Bias, Self attribution bias, SelfControl Bias. The third section explains about the methodology and questionnaire for the study. The fourth section comprises the result, pursued by discussions and conclusions.

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## Over confidence Bias

“Overconfidence can be defined; an investor has subjective trust in ones’ insightful decisions and capability. When the investor dealing in capital market and investing into securities is very much confident about his/her own strategies and judgments, then his/her decision making may be under the influence of overconfidence bias. In the situation of overconfidence investor may take the occurrence of an event granted, but in changing economic scenario it is possible that it may or may not happen. The outcome of overconfidence may be seen in the forecasting of strategies, predication and the certainty of the happening of an event. Further the overconfidence bias can be divided into two types, which are given as below:”

- 1. Prediction Overconfidence:** “When investor underestimate their investment prediction or too narrow.”
- 2. Certainty Overconfidence:** “When investors are frequently certain about their judgments.

Many researcher have worked on overconfidence bias, one of the research work on overconfidence has been done by Professor Barber B and Odean T (2001), and published in the paper as” “Boys will be boys: Gender, Overconfidence and Common Stock Investment” “In many circumstance overconfident investors are likely to decrease the expected utility of portfolio by trading on the basis of unrealistic beliefs. Also it is seen that over confidence leads to high churning or turnover of the portfolio.”

Over confidence can be reviewed as superfluous confidence in ones’ perceptive interpretation, judgment, and cognitive ability (“Pompian, 2006”). Over confidence can be summarized as invasive person characteristics, founded by Psychologists (“De Bondt & Thaler, 1995”).

“**Fischhoff, Slovic, and Lichtenstein (1977)**”, the authors concluded from their studies pragmatic that investors are badly assessed when estimated probability. According to probabilities, the event which they thought are definite to happen actually happen only 80 percent of the moment, and incidents they thought are not possible to happen; they happen roughly 20 percent of the moment. “Shefrin (2000)” explains over confidence with the help of example of driving approach of the investors. While conducting the research it was asked by the group about the driving ability of the investors and 65 percent to 80 percent of the respondent rated themselves over confident.

“**Montier (2002)**” the author did his study on the basis of three hundred specialized fund executives in which he founded that approximately 74 percent investors judge that their performance is not only good but above average and the remaining 26 percent judge that their performance was only regular. From this we can say that roughly all the respondent thought that their performance was regular or better. In two of the above studies, it can be concluded that over confidence was calculated through more than average effect which is a tendency in human to embellish their abilities. After analyzing the

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studies, author concluded that on practically any dimensions that is both skewed and communally desirable, most investor will see themselves as regular than average “(Myers, 1996)”.

“**Camerer and Lovallo (1999)**”, they originate that due to optimism and over confidence among people increases the business entry because they are optimism and over confidence about their in build skills and because of failure in business they quit later on.

“**Barber and Odean (2000)**”, they found that the investor who is overconfident, they overestimate the accuracy the information get from the market and thus the probable profits by trade. They also found that individual invest their general stock investment about 70 percent per annum.

### **Self attribution bias**

“Self attribution bias have tendency to guilt of breakdown to outside influence such as awful luck, influence of information etc. while ascribe credit of success to themselves such as talent or foresight. A very good example for self attribution bias is that when students perform well in their exam, they give credit to their intelligence and hard work, while if they are not able to perform well they give explanations such as tough question paper, unfair grading system, and fatigue from continuous exams etc. Self Attribution bias is actually divided into two types”:-

- “Self Enhancing Bias, which is a mental bias where investor claim an irrational degree of their own intelligence for the success achieved.”
- “Self Protecting Bias is where investor protects themselves in case of failure.”

“**Terrence Odean and Simon Gervais (2001)**, also discussed Self Attribution”

“Bias in their paper “Learning to be overconfident”, in which they have talk about that traders in stock market also show the susceptibility of self Enhancing bias which finally leads to Overconfident Bias.”

### **“The studies also disclose that:”**

- “Phases of common wealth are followed by phases of higher than predictable trading volumes, which is because of overconfident behavior of investors.”
- “When the overconfidence increases the trading volume, the net profits comes down because of high transaction charges.”
- “The Young and consecutively successful contender trade the most and demonstrate more confidence.”

“While concluding, it can be said that, the traders while assessing their ability takes too much credit for their own success which leads them to be overconfident which in turn lowering down the expected profit because of trading excessively in markets.”

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## Self control Bias

“Self control Bias is the human being propensity which leads them to devour today at the cost of accumulate for tomorrow. Most common illustration of this bias is that when a individual come to know about their tax liability has to be increased in the end of a Financial Year then they can react in two way, either he/she will contribute the tax liability amount aside in saving Bank A/C or start making small installments towards tax liability at periodic intervals. Professors Richard H. Thaler and Shlomo Benartzi (2002) developed the concept “Save More Tomorrow Program” in which four important points are highlighted. uld go for a saving bank A/c as the interest will be earned on the amount deposited, but it has been observed that mostly investors go for second option.”

- “The Retirement Savings are to be imposed on the individuals.”
- “The contribution of individuals should increases automatically with time.”
- “The contribution keeps increasing till the maximum contribution.”
- “Individual can choose any plan at any time.”

“Lusardi’s (2001), she wrote “Explaining Why So Many Households Do Not Save”, in her empirical analysis it has been shown that individuals who save at lower rate do not plan for their retirement, while those who plan for retirement are more concerned for savings for future. Also investors planning for their retirement are more likely to invest in less complex investment options, such as PPF.”

## Conservatism bias

“In conservatism bias we study the mentality of the people who are conservative or risk averse and to cling to their prior views. Investors with conservatism bias under react the newer information about investment because they found it costly or risky, as compared to the investment option they are already dealing in.

But in reality investors may reveal in two different ways of biases, if the new information is as per the investor’s likeliness and appears to be fit, he may show his representative behavior, otherwise the conservative behavior will dominate, if there is no representative relationship.

**James Montier (2002)**, the author of Book “Insights into Irrational Minds and Markets”, reveals about his study that the behaviour of the securities analysts in the capital market is also affected by Conservatism Bias, because of which they tend to stick to the forecasts they have made and even when the new information is available to them.

Investors show inflexible behavior when new information comes to them, because investors being stick to a sight or future. The reaction of the investor is slow and feels trouble to a great extent in processing the new information. This behavior of the investor is also well explored in the research paper “A model of investor Sentiment,” written by Robert Vishny and Nicholas Barberis (1998) under the guidance of Andrei Schleifer (1998), where they explore that sometimes investor respond very

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slight to new information and that in another case they respond very much.” They also found that, if the investors make a trust on those stocks that perform well in past 3-5 years and take a future investment decision on that, which leads to undue overpricing of stock which also affects the performance of other stocks.

### **Behavioral implications of overconfidence**

Past researches suggest that investors are overconfident about their capability to envisage the future and they overvalue their capability to assess a company as a prospective investment. According to Barber and Odean (2001), investors who are overconfident, they trade terribly which in turn leads to poor returns. They underrate the downside risk because they pay no attention to past investment statistical performance, which results in reduced portfolio performance, this is due to, they hold undiversified portfolios.

**Kahneman and Riepe (1998)**, In this paper the chief aim of the author is to discover the reasons of overconfidence and how investors’ “are affected by it. He argues that when people overrate their knowledge, undervalue their risk and overrate their skill to manage event, they suffer from overconfidence bias.”

“**Odean (1998)** in this paper the main objective of the researcher is study the trading behavior of the investors, by evaluating operating reports for 10,000 account, 6,380 trade stock in the CRSP file for a total of 97,483 transaction at a high discounts brokerage house. He argues that investors who are overconfident employ in trading more eagerly than to rational investors“. These effects into overestimation of their expected gains and uninterrupted participation in expensive dealing.”

### **Gender and Biases**

Although men and women are found to be overconfident, many studies have shown that the extent of overconfidence varies according to the gender; men are overconfident than women.

**Lewellen, Lease, and Schlarbaum (1977)** from their research they found that women are less confident as compare to men in their behavior.

**Lundeberg, Fox, and Puncchohar (1994)** they state that men overconfidence behavior is depend on the task and risk taken by them.

**Barber and Odean (2001)** made a research on households, how they do the investment. The research was done on 35,000 households, between 1991 and 1997, and found that overconfident investors overestimate the correctness of their information and thereby the expected gains of trading. They also found that women are less confident than men but they perform better than the men.



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**Pompian and Longo (2004)**, in their study, they emphasize on the personality type and correlate with gender, which help them to produce better investment outcomes. From their study they have found that personality types and both genders are differently inclined to numerous behavioral biases.

**Gervais and Odean's (2001)** model shows that the investor's overconfidence takes place from self-serving self-attribution bias.

**Deaux and Farris (1977), Meehan and Overton (1986), and Beyer (1990)** from their research they have found that women are less prone to self-attribution bias than men.

**In line with the above inquiry, the following hypothesis is formulated:**

**H1.** Women are less overconfident than men.

**H2.** Women are less self-attributive than men.

**H3.** Women are more risk averse than men.

**H4.** By less risk averse, men perform less than women in trading.

**H5.** Women are more prone to self control bias than men.

### **Self-attribution bias and Overconfidence bias**

**“Daniel et al. (1998)”**, “in this paper researcher work on two psychological biases and biased self attribution and investors tend to react as overconfident relating to their private 31 information. This reaction happens because they believe that their information is more accurate than it actually is.”

**“Eastwood and Nutt” (1999)**, “investigate that individuals have a tendency to overestimate the optimistic news and underestimate the pessimistic news. They also conclude that the behavior is constant with those people who analytically responding in an optimistic manner.”

**“Doukas and Petmezas” (2007)**, “examine that self attribution is a source of overconfident managers. They also investigate that overconfident managers could also acquire the superior abnormal returns. The research of the paper is based on the influences of joining waves, company shock and macroeconomic conditions and found that overconfident bidders realize lower returns as compare to rational investors and managerial overconfidence comes from self attribution bias.”

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**“Deaux K. and Farris E. (1977), Meeham A.M. and Overton W.F. (1986)”**, “establish that the self helping attribution bias was higher in man as compare to woman which shows that man are more confident than the woman. Gender differences in attribution and expectancy patterns occur primarily on „masculine task.”

**“Estes R.H. and Hosseini J.” (1988)**, “examined that male are more confident than female investors. While taking the investment decision females face less confident even when controlling for backdrop and capability even though the expected returns of the diverse investments were the same. They have used Multiple regression to manage statistically variation among subject (N=1359) nationwide and build up a model of investment decisions confidence.”

**“Harlow W. V. and Keith Brown (1990)”**, “found that women prefer less risk stake when said to make selection in an experimental markets environment, involving auction and lottery. They also laid down the emphasis on relation between risk tolerance and behavioral traits of the investors. The method they use to determine the difference between the gender differences is Fstatistics from ANOVA.”

**“Vicki L. Bogan David R. Just Chekitan S. Dev”, (2013)**, “the main aim of the paper is to examine how portfolio option is exaggerated by the players risk aversion and loss aversion. For this research authors use the economic experimental approach. This paper finds that the presence of male increases the chance to choose the higher risky investment and also increases the loss aversion.”

### **Conservatism bias**

**“Edwards” (1968)**, “finds that due to conservatism bias, investors overvalue the base rates and undervalue the new information, because of this when new information occurs the adjustment of base rate becomes slow.”

**“Lord et al.” (1979)**, “examine that investors are not ready to change their viewpoint very easily. This type of nature comes due to cognitive, time, and prospective financial expense of evaluating fresh information for updating probability judgment.”

### **METHODOLOGY**

The samples were chosen randomly from the population who invest in funds. This study uses a survey research technique, with the help of questionnaire having questions on overconfidence bias and self-attribution bias, risk-averse, self-control. Overconfidence bias in terms of poor calibration, a hallucination of control, better than average, unreal optimism can be measured. In this study, “better than average “is used to measure overconfidence bias and degree of its effect with the help of five points Likert scale. Similarly, questions pattern used for self-attribution, earlier study was used as a

benchmark for developing the scale. The responses based on gender, investment experience and level of experience. The one with less than two years of investment history, considered as less experienced and the one with a history of investment for more than two years, considered as more experienced. This study primarily focuses on gender prospects though the level of overconfidence and self-attribution for different gender will provide better insights, we restricted the study to understand the various prospects from the viewpoint of gender who has different levels of work experience and investment history.

To measure the dimensions of overconfidence, self-Attribution, Risk Averse, and self-control bias, a five-point scale of strongly disagree to strongly agree was used. Responses about the feelings of respondent against above dimensions were considered.

Analysis of Variance (ANOVA) as statistical test was applied to test the significant difference between the Gender and overconfidence bias, self-attribution, risk-averse & self-control.

## ANALYSIS AND RESULT

### Descriptive statistics

The demographic profile of the respondents is depicted in Table 1.

**Table 1: Demographic profile of the respondents**

1. Gender			2. Marital Status		
	Frequency	Percent		Frequency	Percent
Male	126	36.0	Married	231	66.0
Female	224	64.0	Unmarried	119	34.0
Total	350	100.0	Total	350	100.0

3. Occupation			4. Experience		
	Frequency	Percent		Frequency	Percent
A homemaker	14	4.0	less than 2 years	35	10.0
Employed for wages	315	90.0	2 years and above	315	90.0
Self-employed	21	6.0	Total	350	100.0
Total	350	100.0			

### Overconfidence and gender

#### H1: women's are less overconfident than men.

Table 2 shows the perception of the respondent which is classified on the basis of gender. The mean score for "As compared to other drivers on the street, i am the better drive" given by male respondent is

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3.94 and by female respondent is 3.43. the ANOVA table shows F value of 20.273 and significance value of 0.000009. Since the significance value if  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for “While Driving On The Road I Always Become Cautious” given by male respondent is 4.27 and by female respondent is 4.12. the ANOVA table shows F value of 3.415 and significance value  $>0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for “According To My Opinion, On Average, I Cannot Predict Future Share Prices Better Than Others.” given by male respondent is 3.83 and by female respondent is 3.75. the ANOVA table shows F value of 0.511 and significance value  $>0.05$ .

Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for “You Invest In Stock Markets Which Is Giving 10% Annualized Return Since Past 10 Years.

Your Prediction For This Year Is Also Above Average” given by male respondent is 3.50 and by female respondent is 3.43. the ANOVA table shows F value of 0.388 and significance value  $>0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for “After Making An Investment In A Stock, You Overhear A News Report, Which Implies That It Does Not Perform Well. The Information Confirms That You Have Made A Wrong Decision” given by male respondent is 2.88 and by female respondent is 3.09. the ANOVA table shows F value of 5.177 and significance value  $< 0.05$ . Since the significance value if  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for “I Prefer Buying Of Stock In Downward Trend” given by male respondent is 3.22 and by female respondent is 3.15. the ANOVA table shows F value of 0.467 and significance value  $>0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. Hence the Null hypothesis is accepted.

		N	Mean	Std. Deviation	Std. Error	F	Sig.
As Compared To Other Drivers On The street, I Am The Better Driver	MALE	126	3.9444	.85140	.07585	20.273	.000
	FEMALE	224	3.4375	1.09037	.07285		
	Total	350	3.6200	1.03860	.05552		
While Driving On The Road I Always Become Cautious	MALE	126	4.2778	.87305	.07778	3.451	.064
	FEMALE	224	4.1250	.65097	.04350		
	Total	350	4.1800	.74106	.03961		
According To My Opinion, On Average, I Cannot Predict Future Share Prices Better Than Others.	MALE	126	3.8333	1.07145	.09545	.511	.475
	FEMALE	224	3.7500	1.03308	.06903		
	Total	350	3.7800	1.04629	.05593		
You Invest In Stock Markets Which Is Giving 10% Annualized Return Since Past 10 Years. Your Prediction For This Year Is Also Above Average.	MALE	126	3.5000	1.01784	.09068	.388	.534
	FEMALE	224	3.4375	.82865	.05537		
	Total	350	3.4600	.90040	.04813		
After Making An Investment In A Stock, You Overhear A News Report, Which Implies That It Does Not Perform Well. The Information Confirms That You Have Made A Wrong Decision	MALE	126	2.8889	.93998	.08374	5.177	.023
	FEMALE	224	3.0938	.72443	.04840		
	Total	350	3.0200	.81332	.04347		
I Prefer Buying Of Stock In Downward Trend	MALE	126	3.2222	.91990	.08195	.467	.495
	FEMALE	224	3.1563	.83513	.05580		
	Total	350	3.1800	.86588	.04628		
*Significant at 0.05 level.							
Std. Dev., standard deviation; Sig., Significance Level; F-Value, ratio of two sample variances.							

## Gender v/s self- attribution

### H2: women are less self-attributive than men

Table 3 shows the response for perception based on gender for self-attribution. The mean score for “ If My Portfolio Does Well, I Will Give Credit To My Investment Skills” given by the male respondents is 3.55 and for female respondents is 3.81. The ANOVA output shows F-value is 8.107 and significance is  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for “ After Making An Investment, I Hear News Which Is Not Supporting My Investment Decision. I Give Blame To My Awful Luck.” given by the male respondents is 2.28 and for female respondents is 2.93.

The ANOVA output shows F value is 34.751 and significance is  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for The Return On My Investment Was Above Average, Due To My Specific Skills.” given by the male respondents is 3.66 and for female respondents is 3.46. The ANOVA output shows F-value is 4.745 and significance is  $< 0.05$ , the mean difference is significant which implies that

difference in response on the basis of gender is statistically significant. The mean score for its Not Always Wise for Me to Save, As Many Things Turn out to Be a Matter of Good or Bad luck” given by the male respondents is 2.89 and for female respondents is 3.43. The ANOVA output shows F-value is 21.782 and significance is < 0.05, the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for “I Feature My Investment Success to My Acquaintance and Understanding of the Stock Market” given by the male respondents is 3.72 and for female respondents is 3.65. The ANOVA output shows F-value is 0.416 and significance is > 0.05, the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for “I Ignore the Association between Different Investment Possibilities” given by the male respondents is 2.84 and for female respondents is 3.25. The ANOVA output shows F-value is 14.408 and significance is < 0.05, the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. Hence the null hypothesis is rejected

**Table 3: Gender v/s self- attribution**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						F	Sig.
If My Portfolio Does Well, I Will Give Credit To My Investment Skills	male	125	3.5520	.90211	.08069	8.107	.005
	female	224	3.8125	.76973	.05143		
	Total	349	3.7192	.82782	.04431		
After Making An Investment, I Hear News Which Is Not Supporting My Investment Decision. I Give Blame To My Awful Luck.	male	125	2.2800	1.05188	.09408	34.751	.000
	female	224	2.9375	.96839	.06470		
	Total	349	2.7020	1.04635	.05601		
The Return On My Investment Was Above Average, Due To My Specific Skills	male	125	3.6640	.94991	.08496	4.745	.030
	female	224	3.4688	.70800	.04731		
	Total	349	3.5387	.80717	.04321		
It'S Not Always Wise For Me To Save, As Many Things Turn Out To Be A Matter Of Good Or Bad luck.	male	125	2.8960	1.10588	.09891	21.782	.000
	female	224	3.4375	1.00028	.06683		
	Total	349	3.2436	1.06983	.05727		
I Feature My Investment Success To My Acquaintance And Understanding Of The Stock Market	male	125	3.7200	.93843	.08394	.416	.519
	female	224	3.6563	.85372	.05704		
	Total	349	3.6791	.88418	.04733		
I Ignore The Association Between Different Investment Possibilities	male	125	2.8400	1.17364	.10497	14.408	.000
	female	224	3.2500	.83101	.05552		
	Total	349	3.1032	.98595	.05278		
*Significant at 0.05 level.							
Std. Dev., standard deviation; Sig., Significance Level; F-Value, ratio of two sample variances.							

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## Gender v/s risk averse

### **H3: woman's are more risk averse than men**

Table 4 shows the perception of the respondent which is classified on the basis of gender. The mean score for "I Take A Decision To Purchase A Stock, But Just Before Buying A Stock If I Hear News Which Is Not Supporting My Decision. But I Will Stick To My Earlier Decision." given by male respondent is 2.88 and by female respondent is 3.12. the ANOVA table shows F value of 5.164 and significance value  $< 0.05$ . Since the significance value if  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. Hence the null hypothesis is rejected

### **H4: by less risk , men perform less than woman in trading**

Table 4 shows the perception of the respondent which is classified on the basis of gender. The mean score for "If There Is Negative Market Information Related To My Investment Option Then I Will Change My Decision." given by male respondent is 3.44 and by female respondent is 3.78. the ANOVA table shows F value of 11.995 and significance value  $< 0.05$ . Since the significance value if  $< 0.05$ , the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. The mean score for "I Prefer To Invest In Already Known Funds" given by male respondent is 3.77 and by female respondent is 3.93. the ANOVA table shows F value of 2.923 and significance value  $> 0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for "I Often Find It Comfortable To Select The Investment From Another Person'S View" given by male respondent is 3.33 and by female respondent is 3.34. the ANOVA table shows F value of 0.008 and significance value  $> 0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for "I Take The Responsibility Of Managing My Portfolio And I Trust My Decisions" given by male respondent is 3.94 and by female respondent is 3.84. the ANOVA table shows F value of 1.038 and significance value  $> 0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for "I Think It Is More Important To Have Safe Investments And Guaranteed Returns, Than To Take A Risk To Have A Chance To Get The Highest Possible Returns" given by male respondent is 3.66 and by female respondent is 3.81. the ANOVA table shows F value of 1.499 and significance value  $> 0.05$ .

Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. Hence the null hypothesis is accepted.

Table 4: Gender vs risk averse							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						F	Sig.
I Take A Decision To Purchase A Stock, But Just Before Buying A Stock If I Hear News Which Is Not Supporting My Decision. But I Will Stick To My Earlier Decision.	male	126	2.8889	1.05240	.09376	5.164	.024
	female	224	3.1250	.85888	.05739		
	Total	350	3.0400	.93857	.05017		
If There Is Negative Market Information Related To My Investment Option Then I Will Change My Decision.	male	126	3.4444	1.01631	.09054	11.995	.001
	female	224	3.7813	.78175	.05223		
	Total	350	3.6600	.88693	.04741		
I Prefer To Invest In Already Known Funds	male	126	3.7778	.85687	.07634	2.923	.088
	female	224	3.9375	.82865	.05537		
	Total	350	3.8800	.84120	.04496		
I Often Find It Comfortable To Select The Investment From Another Person'S View.	male	126	3.3333	1.05830	.09428	.008	.927
	female	224	3.3438	.98993	.06614		
	Total	350	3.3400	1.01358	.05418		
I Take The Responsibility Of Managing My Portfolio And I Trust My Decisions	male	126	3.9444	1.02999	.09176	1.038	.309
	female	224	3.8438	.79666	.05323		
	Total	350	3.8800	.88761	.04744		
I Think It Is More Important To Have Safe Investments And Guaranteed Returns, Than To Take A Risk To Have A Chance To Get The Highest Possible Returns.	male	126	3.6667	1.25220	.11155	1.499	.222
	female	224	3.8125	.95205	.06361		
	Total	350	3.7600	1.07036	.05721		
*Significant at 0.05 level.							
Std. Dev., standard deviation; Sig., Significance Level; F-Value, ratio of two sample variances.							

## Gender and self-control

### H5: woman are more prone to self-control bias than men

Table 5 shows the perception of the respondent which is classified on the basis of gender. The mean score for "I Am Generally Able To Protect My Personal And Present Interests" given by male respondent is 4.16 and by female respondent is 4.12. the ANOVA table shows F value of 0.58 and significance value  $> 0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant. The mean score for "While Investing, I Always Plan For Retirement" given by male respondent is 3.38 and by female respondent is 3.62. the ANOVA table shows F value of 3.398 and significance value  $> 0.05$ . Since the significance value if  $> 0.05$ , the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant.



The mean score for “I Always Put My Income In Different Buckets As Of Retirement, Health, Home, Entertainment Etc.” given by male respondent is 3.77 and by female respondent is 3.90. the ANOVA table shows F value of 1.749 and significance value >0.05. Since the significance value if > 0.05, the mean difference is not significant which implies that difference in response on the basis of gender is statistically not significant.

The mean score for “If I Have Savings Of Inr 2,00,000, I Would Prefer To Deposit Them In A Saving Bank Account Rather To Invest In Stocks To Avoid The Risk” given by male respondent is 2.83 and by female respondent is 3.53. the ANOVA table shows F value of 22.072 and significance value < 0.05. Since the significance value if < 0.05, the mean difference is significant which implies that difference in response on the basis of gender is statistically significant. Hence the null hypothesis is accepted.

<b>Table 5: Gender and self-control</b>							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						F	Sig.
I Am Generally Able To Protect My Personal And Present Interests	male	126	4.1667	.60332	.05375	.580	.447
	female	224	4.1250	.41551	.02776		
	Total	350	4.1400	.49101	.02625		
While Investing, I Always Plan For Retirement	male	126	3.3889	1.25839	.11211	3.398	.066
	female	224	3.6250	1.08496	.07249		
	Total	350	3.5400	1.15421	.06170		
I Always Put My Income In Different Buckets As Of Retirement, Health, Home, Entertainment Etc.	male	126	3.7778	1.03452	.09216	1.749	.187
	female	224	3.9063	.76654	.05122		
	Total	350	3.8600	.87326	.04668		
If I Have Savings Of Inr 2,00,000, I Would Prefer To Deposit Them In A Saving Bank Account Rather To Invest In Stocks To Avoid The Risk.	male	126	2.8333	1.46833	.13081	22.072	.000
	female	224	3.5313	1.25241	.08368		
	Total	350	3.2800	1.37368	.07343		
*Significant at 0.05 level.							
Std. Dev., standard deviation; Sig., Significance Level; F-Value, ratio of two sample variances.							

The result of our study shows that (1) woman are less overconfident then men (2) women are not less self-attributive than men (3) woman are not more risk averse then men (4) by less risk, men perform less then woman (5) woman are more prone to self-control bias than men.

## CONCLUSION AND DISCUSSION

Traditional finance assumes that investors are more rational while investing in the funds. Behavioural finance loosen up the traditional assumption of finance by incorporating the noticeable behaviour of humans from rationality to standard models. One of the the noticeable behaviour is Overconfidence.

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This study draws an overall picture of impacts of four behavioral factors on the investment patterns of gender. This study also indicates that the role of gender on overconfidence have prove that the women are less confident than men, as we have already studied in the previous studies of eminent author such as Deaux K. and Farris E. (1977), Meeham A.M. and Overton W.F. (1986), Estes R.H. and Hosseini J. (1988), Beyer S. (1990), Olsen and Cox (2001). The result got from the analysis implies that the women investors are not conservative or risk averse and not cling to their prior views. Women Investor welcomes the newer information about investment because they found it appropriate or beneficial, as compared to the investment option they are already dealing in. As the maximum percentage of respondents are conservative in their actions and sure that they will cross check the reasons of underperformance of their security, shows their conservative nature. Because of this attitude they may miss an opportunity or a vital piece of information benefiting their portfolio. There is a significant difference in both genders with regard to risk perspective. The empirical results from the above shows that women are less risk averse than men and men move towards more risk neutral behaviour. So we can conclude that male investor invest money on the basis on their return and safety perspective.

When we comparing self attribution nature among gender, we found that women are less self attributive than men. Women does not give credit of their success to themselves and nor transfer the guilt of breakdown to outside influence. The above study validates the presence of bias among the various investors. Gender does have an impact on investor's bias. This study contributes to the existing studies on behavioral biases, particularly the influence of gender on overconfidence and conservatism bias. This study also helps the financial advisors and individual investors for taking their financial decisions.

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# New Purchase Determinants of Hatchback Car Buyers During Covid-19. A Localised Study

**Alamgir Sani**

Research Scholar (Department of Applied Economics and Commerce, Patna University)

Email - alamgir.sani@sharda.ac.in

## **ABSTRACT**

*The hatchback car models has been a segment exhibiting promising market growth in India. Buyers from West Delhi Metropolitan area have increasingly adopted hatchbacks as their preferred mode of transportation making its acceptance evident among the buyers. This research work intends to identify and ascertain the changing brand inclination and predisposition of consumers, with respect to hatchback models of cars, during the Covid-19 pandemic spread in the West Delhi markets. The investigation demonstrated that customers in this region predominantly are positively disposed and have a distinct inclination towards Maruti Suzuki brand in hatchback cars. The study deploying a two stage research design involving the exploratory and descriptive methodology, making use of secondary as well as primary data collected with the help of a structured questionnaire, provides us evidence that at the time of making the buying factors and determinants like fuel efficiency, safety, aesthetics, performance attributes and value for money are key considerations affecting customer's brand inclination for hatchback cars. These determinants are consistent with the fact that during this Covid-19 crisis, on account of reduced purchasing power, customers are particularly looking for value for money and fuel efficiency, so that the acquisition and maintenance costs are kept to the minimum, in times of a crisis like Covid-19, which has witnessed considerable erosion in the disposable income of the consumers. The same is substantiated through Exploratory Factor Analysis that performance, safety, value and aesthetics positively influence the customer's satisfaction. Hence, hatchback car marketer's need to focus on worthwhile augmentations enhancing consumer perception regarding the quality of brand, its features and benefits. With tough competition in the Indian market, competitive price and affordability along with superior quality and reasonable maintenance requirements for buyers' becomes a must. Fuel efficiency factor obviously remains an indispensable factor with a distinct bearing on the consumer's choices, especially in the times of the Covid-19 pandemic, which has brought about a considerable attrition in the ability of the consumers to acquire and maintain a passenger car. The marketers' need to consider these crucial dimensions, since Indian consumers are thoughtful of these critical aspects while assigning considerable weightage to them at the time of pre-purchase decision making for buying hatchback car models.*

**Keywords:** *Hatchback, Consumer preference, buying determinants, Brand, Customer Satisfaction etc.*

## **INTRODUCTION**

In today's day and age, a passenger car has come to be an absolute essential mostly for intra-city movement and mobility. Each family, without exception, having the required wherewithal desires to and dreams of being the owner of a passenger vehicle. The economic liberalization and openness resulting in large scale, privatization, which in turn gave fillip to globalization and the consequent policy adopted by the government of India in 1991, opened the gates for a large number of top foreign passenger vehicle manufacturers. The foreign MNC car brands from all over the world were invited and a conducive atmosphere created for their setting up manufacturing facilities and plants in India.

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The automobile industry underwent a drastic transformation, especially in the passenger car segment as a result of the entry of a multitude of foreign players in this segment such as Toyota, Honda, Ford, General Motors, and Hyundai etc. Domestic passenger car makers like Tata, Mahindra and Mahindra, Hindustan Motors and MUL were certainly offered really tough competition by these MNC giants and new rivals on the domestic turf.

The passenger cars come in different and diverse models and configurations such as, Hatchback, Sedan, SUV, etc. Last two decades have seen the hatchbacks as distinct configuration and model emerging as one of the most significantly growing segments in the domestic passenger car market. The first hatchback model launched in India was Maruti 800, way back in the year 1983, which proved to be a run-away success and since then a staggering 2.5 million units have been rolled out from its production lines and sold in the domestic Indian market. As of now, there happen to be a large number of intensely competing brands with hatchback models enabling customers the luxury of a large and diverse number of options and alternatives. The fact that there are a large number of alternatives in this segment is one of the most important factors necessitating the study of studying and exploring the consumer buying behavior in this segment. The constant and relatively steady increase in the population's disposable income, large number of models to choose from combined with easy, hassle free and cost effective, availability of financing happen to be some of the factors driving the growth in hatchback passenger car segment and the future, if anything looks even brighter, notwithstanding the current and present day slump in the market due to the global pandemic, if the past trends are anything to go by. The data affording an insight into the changing consumer tastes and preferences has to be collected, collated, parsed and analyzed in order to provide penetratingly precise and actionable intelligence and insights for the marketers. There exist multiple factors and motivators exercising an undeniably powerful and strong influence on the buying behavior of the masses in the hatchback segment of the passenger car market. This has to be analyzed and confirmed through tapping primary data and the variations and transformations in the attitude and outlook of the buyers' mindset have to be penetratingly probed, explored and analyzed carefully by the marketers, in order to constantly keep optimizing the value proposition and thereby staying relevant, meaningful and competitive in the rapidly evolving dynamics of the current day marketplace.

This research effort represents an in depth and exhaustive study undertaken, with a view to identifying and understanding the consumer buying behavior in hatchback segment of the passenger car market in the West Delhi district of the state of Delhi . As we all know, “Consumer behavior is the study of individuals, groups or organizations and the processes they use to select, secure, use and dispose of products, services, experiences, or ideas to satisfy their needs and wants”. Having a precise and stronger grasp and insight into the consumer buying behavior will be a tremendous asset for the brand owners and automobile firms to ensure their survival and growth in the face of an intensely and mercilessly competitive marketplace, which knocks the under performers off their precarious perch, without even giving it a second thought. This serves to enhance the marketer's ability to better forecast

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and predict the likelihood of the consumer's acceptance of their various informational and environmental cues and plan their marketing strategies in sync with that. It is also a big aid and helps in the task of crafting an optimum product and brand positioning. A nuanced and comprehensive understanding of the relevant markets is an indispensable prerequisite, for the purpose of opportunity analysis and the resultant designing of a suitably corresponding marketing plan of action accordingly.

We, as a rational and logical beings can't be faulted for wondering as to why people behave the way they actually do in the market place. At times we feel satisfied and in complete accord with our own acts, though hard put to rationalize them. Diverse and different questions keep constantly agitating our minds. The present study and enquiry, particularly focuses on a rational and logical analysis of consumer buying behavior, as it pertains to entry level passenger cars in the hatchback segment. It would be immensely helpful and handy for various entry level passenger car manufacturers and brands to intimately and deeply understand and get to know about the buying behavior and tendencies of the population of West Delhi district of the state of Delhi, contributing immensely to their formulation and execution of effective, impactful and comprehensive marketing and communication strategies for their entry level hatchbacks.

The prime purpose and intent of this study is to be able to provide the marketers and academicians with a comprehensive, actionable and nuanced academic as well as managerial insight and understanding of the consumer buying behavior focused on the universe of its study i.e., West Delhi, falling within the state of Delhi. The paper represents an honest and well intentioned attempt to arrive at a resolution of the question agitating the minds of the academicians and the marketers alike as to the factors influencing and impacting the buyer decision choices, when it comes to the purchase of entry level hatchbacks in the Indian markets with special reference to the West Delhi market, which happens to be the universe of this study.

## **REVIEW OF LITERATURE**

India happens to be a developing country. The standard of living of the Indian people has seen a tremendous improvement since the last two- three decades and same is the case with automobile industry. Post, the Foreign Direct Investment Policy and shift towards opening up of the economy to the foreign investors in diverse sectors of the economy, by the Government of India in 1991, a large number of best of the breed foreign car makers entered India and deluged the car market with the best of models and brands. The consumer was, suddenly spoilt for choice. This suddenly hiked the intensity of competition for the domestic passenger car brands on their own turf. The extremely creative, innovative and attractive cars on offer along with reliability and quality to boot and globally benchmarked processes and business practices, almost overnight, transformed a largely seller's market to the buyer's market, that it is today.

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By studying the factors influencing and impacting customer's choices, it is very well possible to develop precisely customized marketing strategies that. (Menon, 2017). Buyers' passenger car selection and choice depends on every single accessory and component of the passenger cars and numerous other attendant factors and circumstances (Peter and Donnelly, 2011). A study carried out in Malaysia established that product safety happens to be a critical factor and major consumer concern impacting the purchase of vehicles (Kassim et al 2016). Another factor having an important bearing is the buyers' financial conditions which additionally impacts their decision preferences. In on more study conducted in the city of Pune, the income fluctuations and increased fuel prices proved decisive in driving the buyers to go for entry level passenger cars. (John and Pragadeeswaran, 2014). Rajasekar and Rameshkumar (2015) established with the help of a study that fuel efficiency and prices exercised a strong influence on the buyers of Madurai, while deciding about the purchase of passenger cars. Demographic factors like the kind and type of employment has also been shown to be a major factor influencing their income and consequently their preference in passenger car purchase. One study conclusively established that well employed people at various places and sectors have a higher tendency to buy high end cars as compared to the ones in business or self-employment (Kumar et al, 2016). In view of the same, tastes and priorities are strongly recommended to be analyzed and explored by the marketers (Davey and Balakrishnan 2017). Moreover, buyers, their drives and motives are very difficult constructs to generalize, on account of undeniably acute and sharp differences existing and persisting between generations, their wants and acuties. Therefore, strategies carried into implementation, after in-depth and penetrating study of the markets are likely to pull, more number of buyers (Davey and Balakrishnan 2017). An empirical study conducted in the city of Hyderabad brought out that entry level car industry in Hyderabad is overwhelmingly dominated by brand Maruti. What is more, purchase decisions influencers like friends and family recommendations exercise a strong influence on passenger car buying behavior (Ravinder and Srikrishna, 2017). Recommendations and endorsements and good word of mouth coming from friends has also been shown to be extremely decisive factor influencing passenger car buying decision choices amongst of people of Coimbatore (Sudhakar and Venkatapathy, 2009).

Though, quite a number of studies have focused on brand preference and brand choice determinants as it pertains to passenger cars, only a small number of them have trained their focus on entry level segment of the hatchback cars. So far, there has been no comprehensive and exhaustive research effort aimed at determination of the factors impacting and influencing the entry level hatchback purchase decision choices as it pertains to the users residing in the Greater Noida area of the National Capital Region. In view of the same, the extant study is specifically designed to explore, discover and establish the factors exercising strong and significant influence on the customers' brand preference and proclivities for entry level hatchback car models in the national capital region of Greater Noida.

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## **OBJECTIVES:**

### **The objectives of this study are:**

1. To investigate, explore and understand the brand preference/choice inclinations as it pertains to the entry level hatchback passenger cars in the West Delhi District of the state of Delhi, during Covid-19 pandemic.
2. To study and understand the features and factors exercising a strong influence and driving the buyers to go for entry level hatchback car configurations in general, as it pertains to the buyers residing the West Delhi district of the state of Delhi, during the Covid-19 pandemic.

## **RESEARCH METHODOLOGY**

In the present study, a pilot survey has been conducted to understand the consumer behavior in the West Delhi region including areas of Pitampura, Rohini, Punjabi Bagh, Janak Puri, Patel Nagar etc. We have actualized arbitrary examining strategy to comprehend the conduct of the clients who need to buy a hatchback car. The specimen information and data have been gathered from 200 customer through online organized questionnaire. Keeping in mind the end goal to comprehend the conduct part of buyer for hatchback car purchases and the brand inclinations and dispositions during the Covid-19 pandemic, investigations have been done. Further, to comprehend the key factors that are moving the buyers towards the brand choices and inclinations towards hatchback passenger cars during the Covid-19 pandemic, and if it is significantly different compared to the normal times, the exploratory factor examination has been executed.

## **RESULTS AND DISCUSSION**

To conduct the survey, demography of the population was first studied (Table 1) to see the position of consumers.



**Table 1: Demographic factor analysis of 200 consumers of West Delhi region involved in the survey.**

<b>Particulars</b>	<b>Frequency</b>	<b>Percent</b>
<b>Stage (Years)</b>		
up to the age 20	4	2.00%
21 to 30	80	40.00%
31 to 40	65	32.50%
41 to 50	22	11.00%
Beyond 50	29	14.50%
<b>Sex</b>		
Male	132	66%
Female	68	34%
<b>Educational Condition</b>		
No Proper qualification	2	1.00%
Higher Secondary	10	5.00%
Graduate	69	34.50%
Post-Graduate	102	51.00%
Qualified Professional	15	7.50%
Others	2	1.00%
<b>Profession</b>		
Business Profession	30	15.00%
Professionals person	40	20.00%
<b>Particulars</b>	<b>Frequency</b>	<b>Percent</b>
<b>Occupation</b>		
Government	40	20.00%
Private	55	27.50%
MNCs	4	2.00%
Retired	10	5.00%
Home Maker	21	10.50%
<b>Monthly Household Income (#)</b>		
Up to 25000	68	30.00%
25001 – 50000	79	39.50%
50001 – 75000	24	12.00%
75001 – 100000	17	8.50%
Above 100000	12	6.00%
<b>Marital Status</b>		
Married	50	25.00%
Unmarried	102	51.00%
Divorced	43	21.50%
Widowed	5	2.50%
<b>Family Type</b>		
Nuclear	95	47.50%
Joint	105	52.50%

Total 200 individuals preferring hatchback cars were included in the survey. The demographic analysis showed that the surveyed population had only 34% female individuals while 66% were males. On studying the age group of individuals, 2.0% were up to the age of 20 years, 40% between 21-30 years, 32.5% between 31-40 years, 11% between 41- 50 years and 14.5% were above 50 years.

The study of educational status of the individuals showed that 51% of the population had post graduate degree and 34.5% were only graduates. 1% had no formal education, 5% studied till higher secondary level and 7.5% were qualified professionals.

Out of the people preferring hatchback cars, highest, 55% were in private sector, 15% of individuals had their business and 20% each were professionals and in government sector. Rest 2% individuals worked in MNCs, 5% were retired and 10% were homemaker.

39.5% of the individuals in the survey were in the income group from 25001- 50000, 12.0% were in 51001- 75000 income group and 8.5% were in 75001- 100000 income group. 34% individuals had less than 25000 household incomes while 6 % had above 100000 incomes.

Among 200 individuals, half of them were unmarried, 25% were married, 21.5% were divorced and 2.5% were widowed. If we see the family type of individuals involved in the survey, 52.5% had joint families while 47.5% lived in nuclear families.

### **Brand Preference for Hatchback Cars by Consumers of West Delhi**

**Table 2: Brand Preference for hatchback cars among 200 consumers of the West Delhi district of the state of Delhi:**

<b>Brand</b>	<b>Frequency</b>	<b>Percentage</b>
Maruti Suzuki	120	60.00%
Hyundai	30	15.00%
Ford	3	1.50%
Nissan	3	1.50%
Tata	5	2.50%
Volkswagen	8	4.00%
Honda	20	10.00%
Chevrolet	1	0.50%
Toyota	4	2.00%
Skoda	4	2.00%
Others	2	1.00%
<b>Total</b>	<b>200</b>	<b>100%</b>

According to the investigation, 60.00% of customers preferred brand of Maruti Suzuki hatchback auto or cars surveyed by Hyundai (15.0%), TATA (2.50%), Honda (10.0%), Skoda (2.00%), Ford & Toyota (3.50%), Volkswagen (4.00%), Chevrolet (0.50% per cent) , Nissan (1.50%), and others (1.00%) (Table 2).

### Factors impacting the Buyers' Brand Inclinations of Hatchback Cars

With a specific end goal to group the elements influencing brand's image inclination for hatchback car, the exploratory factor examination with Rotated component analysis was done (Table 3). The after effects of Kaiser-Meyer-Olkin (KMO test) measure of examining amplexness (KMO=0.904) and Bartlett's test of Sphericity (chi-square value= 3064.242; significance=0.000) demonstrates that the factor investigation technique used was suitable (Table 4). The principal segment technique for factor examination (Table 5) was done with Eigen esteems more noteworthy than the one through Varimax revolution utilizing the outcomes got through turned segment lattice are exhibited in Table 3. The general percent of difference of 63.484 shows that each measure exhibits worthy inward consistency. It can be clearly inferred that wellbeing, execution, stylish, esteem, and decision are the main components impacting the buyers' image inclination for hatchback passenger cars.

**Table 3: Exploratory Factor Analysis for the factors affecting consumers brand preference towards hatchback cars using Rotated Component Matrix.**

Rotated Component Matrix					
	Component				
	1	2	3	4	5
Exterior Design (Look & Style)	0.15	0.043	0.74	0.041	0.094
Leg Spacing	0.251	0.653	0.26	0.064	-0.084
Dash Board & Interior Design	0.342	0.073	0.708	0.111	0.09
Speed Alert System	0.456	0.161	0.426	0.135	0.334
Mileage (Fuel Consumption)	0.122	0.719	0.09	0.341	-0.193
Seat Belt Reminder	0.7	0.202	0.117	0.182	-0.005
Side Fenders	0.721	0.001	0.225	0.277	-0.093
Seats comfort	0.334	0.547	0.452	0.028	0.041
Boot Space area	0.408	0.573	0.227	0.255	0.049
Sharp head lamps	0.263	0.273	0.644	0.255	-0.161
Defoggers	0.72	0.362	0.073	0.128	0.062
Anti-Lock Braking System	0.613	0.462	0.193	0.035	0.097
Suspension quality	0.467	0.457	0.443	-0.101	0.141
Tubeless Radial Tyres	0.472	0.281	0.436	0.094	0.212
Driver Airbags	0.604	0.217	0.332	0.141	0.328
Reverse Parking Sensors	0.678	-0.005	0.364	0.141	0.26
Door & Window Features	0.456	0.011	0.525	0.231	0.317
Infotainment System	0.091	0.282	0.087	0.733	-0.081
Cost Effective/Free initial Insurance	0.313	-0.12	0.258	0.701	0.165
Post Sales Service Support	-0.197	0.441	0.364	0.257	0.412
Attractive Financing	0.164	0.217	-0.093	0.684	0.192
Resale Value	-0.01	0.383	0.147	0.732	0.022
Brand Reputation	0.271	0.054	0.187	0.64	0.224
Price of car	0.2	0.664	-0.179	0.258	0.307
Range of Colors	0.382	0.148	0.179	0.253	0.662
Cost Effective Maintenance	0.122	0.801	-0.017	0.141	0.265
Attractive/Free Servicing Options	0.02	0.501	0.412	0.186	0.293

**Table 4: Table showing the results of Bartlett's Test and KMO.**

<b>Bartlett's Test and KMO</b>		
Kaiser-Meyer-Olkin Quantity of Selection Adequacy.		0.904
Bartlett's Test of Sphericity	Approx Chi-Square	3064.242
	Df	350
	Sig.	0

**Table 5: Principal component analysis of the factors through Varimax rotation with Kaiser Normalization carried out on Eigen values >1 (Rotation converged in 8 iterations).**

S. N	Factor Name	Items	Rotated Component Matrix	Eigen Values	Variance (%)
1	Safety	Seat Belt Reminder	0.702	10.401	17.084
		Speed Alert System	0.453		
		Reverse Parking Sensors	0.678		
		Anti-Lock Braking System	00. 613		
		Defoggers	00. 722		
		Tubeless Radial Tires	00. 472		
		Suspension quality	00. 468		
		Driver Airbag	0.604		
		Side Fenders	0.71		
2	Performance	Mileage (Fuel Consumption)	00. 716	2.483	15.73
		Leg Spacing	00. 665		
		Boot Space area	00. 572		
		Seats comfort	00. 547		
		Post Sales Service Support	0.43		
		Cost Effective Maintenance	0.7		
		Price of car	00. 664		
		Attractive/Free Servicing Options	0.502		
3	Aesthetic	Sharp head lamps	00. 645	1.89	12.964
		Dash Board & Interior Design	0.704		
		Exterior Design (Look & Style)	00. 743		
		Door & Window Features	0.525		
4	Value	Attractive Financing	00. 682	1.345	11.946
		Cost Effective/Free initial Insurance cover	0.701		
		Infotainment System	00. 736		
		Brand Reputation	00. 638		
		Resale Value	00. 732		
5	Choice	Range of Colors	0.661	1.01	5.734
		<b>Cumulative % of Variation</b>			<b>63.458</b>

## CONCLUSIONS

The fact that a significant number of people residing in West Delhi district are distinctly inclined towards the entry level hatchbacks, particularly from brand Maruti, which focuses primarily on middle class customers, goes to show that due to the sharp decline in the disposable income, brought about by the Corona Virus Pandemic and the resultant loss of income and employment, purchases of expensive, high-end passenger cars have suffered a setback and entry level cars which are mostly hatchbacks, from value for money brands like Maruti are pulling most of the customers during this pandemic.

Another factor which is significant, in the context of the present Covid-19 pandemic, is that safety features are being emphasized in the extreme, by average buyers. Safety features like Anti-Lock

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Braking System, Speed Alert System, Reverse Parking Sensors, Defoggers, Driver Airbag, Side Fenders, Speed Alert Systems etc had a high eigen value and explained as high as 17.084 percent of the variance, which is very significant. The fact that buyers are emphasizing safety quality and features even in low priced entry level hatchback passenger cars, is significant under the existing circumstances of widespread Covid-19 epidemic because it has to do a lot with human psychology and psychographics, wherein at times of extreme crisis and threat perception around them, people tend to be extra sensitive about their safety, even though the steps they are taking to ensure their safety may not be directly relevant to the threats that they are encountering. This is exactly what has happened, because even though the threat due to Covid-19 is emanating from a different source- virus, but due to high concerns for safety and well being of their loved ones, people are even going to the extent of exercising extreme safety precaution, even in their purchases of consumer durable items like autos and four wheelers.

One other significant outcome of the study in respect of the present Covid-19 pandemic, is that in normal times, the entry level hatchback buyers invariably are predominantly influenced and impacted by the performance factors like fuel efficiency and mileage, cost effective maintenance, affordable pricing of the car, post sales service support, attractive/free servicing options etc , but in the present circumstances of Covid-19 and resultant impact on buying behavior, these performance factors have ended up taking the second place to the consideration of safety factors, with an eigen value of just 2.483 and accounting for a total variance explained of only 15.73 percent as against 17.084 percent for safety features. Clearly this is a big shift in the passenger car buying preferences and in respect of variables influencing the buyers' purchase decision making.

From the other collateral findings of the study, it clearly appears that hatchback passenger cars are largely popular among unmarried males between 21-30 and 31-40 years of age. This study additionally validates that professionals and private segment purchasers lean more towards hatchback automobiles and majority of them are post-graduates. Study also establishes that joint family individuals with household income between Rs. 25001 to 50,000 are more inclined and favorably disposed towards hatchbacks in the passenger car segment.

The survey clearly demonstrates and amply brings out a distinctly pronounced inclination of shoppers towards Maruti Suzuki mark in hatchback auto models. As in current car segment, customers exhibit an unmistakably enhanced inclination towards factors like safety, value for money, wellbeing, execution, stylishness, and aesthetics factors, all the more now days at the time of settling on their buying choice. Component Matrix examination demonstrates that security, execution, stylishness, and esteem are emphatically impacting the customer's in their choice and furthermore gives general fulfillment to the hatchback auto purchaser's. In the scenario obtaining today where the buyers tend to be extremely safety conscious, very aggressive, discriminating, hard to please and increasingly emotionally constrained, circumspect, and value conscious- shoppers taste, preferences and motivations and

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inclinations are prone to quick shifts and fluxes, the hatchback auto makers need to particularly concentrate more on safety, performance, value for money, execution, stylishness, esteem, and range of choices available, with the implicit and underlying goal that customers will have a superior attention to nature of the brand. As in the present passenger car market, there is vicious and intense rivalry among the brands in terms of specifics and attributes such as value, better quality and minimal effort as well. Additionally, Delhi buyers clearly appear to be more cognizant and conscious about the cost competitiveness, safety and fuel efficiency. In view of the same, it is advised that the passenger car makers concentrate specially on factors like safety, cost-effectiveness, increased fuel efficiency, low maintenance cost, better looks and aesthetics, comfort, safety and better driving experience and attractive value proposition so as to be able to make a sharp and pronounced impact on the buyers' psyche and achieve consistently high brand following and brand equity in the intensely competitive passenger car market that obtains today. In the days to come, all the above full spectrum of issues pertaining to their market offer and corresponding delivery have to be properly and effectively redressed by the passenger car makers, consistent with a complementary marketing communication design, if at all they intend to make any significant and meaningful impact in the fiercely safety conscious, highly competitive and extremely demanding marketplace for passenger cars today, where there has been a significant erosion in the purchasing power of the majority of buyers, on account of the economic slowdown and recessionary pressures brought about by this global pandemic of Covid-19, whose end is nowhere in sight even after exacting such a heavy toll on the life, liberty and livelihood of the masses around the world.

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# Revisiting Enron Tragedy from the Perspective of Top Management Moral Responsibility

Garima Madaan Dua<sup>1</sup>, Swati Oberoi<sup>2</sup>, Atul Verma<sup>3</sup>

<sup>1</sup>Assistant Professor, SBS, Sharda University, garima.madan@sharda.ac.in

<sup>2</sup>Assistant Professor, SBS, Sharda University swati.oberoi@sharda.ac.in

<sup>3</sup>Ex Student SBS, Sharda University atulv.0309@gmail.com

## **ABSTRACT**

*In October 2001, Enron scandal unfolded, where the top management mishandled their privileges, manipulated with the data, gave priority to their own interest over others and failed to execute proper leadership actions which gradually led to the downfall of Enron. Arthur Anderson, the coveted public accounting firm also went belly up. Enron was undoubtedly the biggest audit failure and was also the largest case of bankruptcy in the history of an American organizations. In this case, we will revisit the incidents and view it in the light of issues that continues to plague the organizations, even today. We will also analyze the moral responsibility from individual's point of view as well as from the corporation's point of view.*

**Keywords: Enron, Financial scam, Bankruptcy, moral responsibility**

## **Introduction**

Series of corporate scandals surfaced with the filing of Enron bankruptcy in November 2001. Soon after, there was a wave of accounting scandals including World Com, Global Crossing, Tyco, Adelphia, Quest etc. Enron's problem was quickly pushed to the background by successive disclosure of misconduct of corporate which had been center stage at one time. Due to the unethical practices of its visionaries, Enron failed in large part. Observing the misplacement of the ethical compass of the top management at Enron, coupled with other factors that led to their misconduct is a very important information as how to deal with such ethical dilemmas and transgressions in the contemporary scenario.

## **Historical back ground of Enron Corporation**

Enron can be considered as one of the most spectacular fraud scandals of all times. ENRON was forced in December 2001 to file for bankruptcy after the fraud investigations result was made public. The company was “provider of products and services in natural gas and transmission and distribution of electricity and communications for retail costumers” (Chary, 2004: Curall and Epstein 2003). To create a new energy company, Houston Natural Gas was acquired by Inter North in 1985. By combining several pipeline systems, Enron created natural gas pipeline system for the first time throughout the nation. Ken Lay was named as the new chief executive and chairman of the new energy company in

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1986.

Almost a year later, Enron started its first overseas branch at England. Here, Enron followed a new strategy of uncontrolled pipeline market by controlled pipeline business. In 1989, Jeffrey Skilling joined Enron, where he launched a system called Gas Bank under which the supply of natural gas could be locked for long term at fixed rate by its buyer and at the same time, the firm started offering financial help to its oil and gas producers. Enron after acquiring Transport i.e. adora de Gas del Sur started expanding to South America and to the rest of the continent in 1992 (Hosseini & Mahesh, 2016). The corporation traded electricity for the first time in 1994 and it turned out to be one of the biggest profit centers for Enron the very next year.

In 1995 Enron as “Enron Europe” entered the European wholesalers market. In 1996, the construction of Dabhol power plant started in India but due to political issues and feasibility report the project was unsuccessful and was put on sale in 2001. Then Portland General Electric Corporation, the utility serving the Portland, Oregon (USA), was bought by Enron about a year later and then sold to Northwest Natural Gas Co. for about 1.9 billion dollars. In the very same year, Enron started its own Energy Services to provide energy services to commercial and industrial customers (Hosseini & Mahesh, 2016). Thereafter, Enron acquired Wessex Water in 1998 which formed the main basis of its water subsidiary “Azurix” and when one-third of Azurix share was sold to public, the price of the shares fell down sharply after early rise in it. This was amongst the first signs of deep-rooted trouble at Enron. In the same year, Enron Online, the company's commodity trading internet site started to operate (Hosseini and Mahesh, 2016).

In 2000, reflecting the importance of trading among the companies, Enron's annual revenue was 100 billion dollars but the problem with “Azurix” carried on and one senior employee, Rebecca Mark, resigned from her position. In the same year, Enron was ranked the sixth-largest energy company in the world, based on its market capitalization (Hosseini & Mahesh, 2016). While the top management was aware of the debt and illegal practices, until October 2001, the fraud was not revealed but surfaced when Enron announced its actual net worth of 1.2 billion dollars which was significantly lower than the previous year. This gave rise to an investigation by the Securities and Exchange Commission, which disclosed many illegal practices conducted by Enron official, investment banking partners, and the Enron's accounting firm- Arthur Anderson (Lucian & Cristina 2007). The most important dates in this fraud saga are October 16, 2001 and November 8, 2001.

On October 16, Enron announced that it had made losses in last three months, and in further dates announced that it had been overstating its revenue since last four years i.e. From the year 1997, which was approximately around 586 million dollars. The magnitude of the indebtedness of Enron was not depicted clearly in Enron's account at that point of time.



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## **Fraud Analysis: Financial and Timeline Highlights**

Until December 2001, Enron continued to be 'creative' in presenting its accounts to the world. Around 1990s, Enron expanded itself into many areas such as developing pipelines across the continent, water services, online trading services and a power plant, but in order to make these expansions possible it needed large initial capital to invest and very long period to develop. In order to achieve this, Enron raised huge amount of debt funds from the market which means more fund raising from the market would affect its credit rating. Enron was not making enough profits and at the same time for continuing doing business, it had to maintain its credit score. Hence, to achieve its purpose of attaining good credit score, it started making partnerships or acquiring other firms and at the same time started making other special "arrangements" like Special Purpose Entity (SPE) (Hosseini & Mahesh, 2016). The objective of these SPE or firm was simple: to remove all debts and losses away from its balance sheet to make its financial book looks good to the market, to the investors and maintain the good credit rating in the market (Adela, 2016). The strategy that Enron pursued was to find investors who would be willing to invest into financial arrangements with them and hence start various 'managed' entities in name of SPEs. Enron provided guaranty which would help SPE to draw credit from the market. Enron followed this policy so that it would enable several rating agencies and Wall Street analysts to appraise its financing book record attractively in their favour (Loss, 1983). Enron utilized various dependent sectors in raising equity by purposely not fulfilling various legal conditions by taking the advantage of existing lacunae in the law to reform its financial arrangements.

### **ENRON'S Management**

#### **Kenneth Lay (Chief Executive, Chairman and Board Member)**

Enron was created in 1986 after the merger of two pipeline firms from Texas and Nebraska, and Lay took the responsibility as CEO of the newly formed organization. Lay was given full credit for the success of Enron before its collapse. After Jeff Skilling resigned in August 2001, Lay took complete control but had to resign in January 2002 as he was held responsible for loss of billions of dollars of its employees, stockholders and pension fund holders and was under the radar for the disaster (Leung, 2005, Hosseini & Mahesh, 2016).

#### **Jeffrey Skilling (President, Chief Executive and Chief Operating Officer)**

Earlier Jeffrey use to work for the consultancy firm McKinsey and joined Enron in 1990. Skilling was Chief Operating Officer at Enron before becoming Chief Executive. Skilling was one of the main architects of Enron's complex structure and strategy. Skilling resigned from his post in August 2001 without any pay-off (Hosseini & Mahesh, 2016).

#### **Andrew Fastow (Chief Financial Officer)**

Fastow was made accountable for creating the balance sheet that allowed the firm Enron to hide and

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cover up its losses which was amounting to 600 million dollars and as a result he was fired from the company in October 2001. Fastow was also found guilty of secretly making 30 million dollars from these accounting frauds by an internal Enron investigation team (Hosseini & Mahesh, 2016).

### **Clifford Baxter (Vice Chairman and Chief Strategy Officer)**

One of the Enron's most important executive members retired from Enron in 2001, May and committed suicide in 2002, January of guilt of wrong practices at the firm. He had opposed the company's creative accounting practices (Hosseini & Mahesh, 2016).

### **Enron's Auditor (Arthur Andersen) and its evaluation**

One of the world's leading accounting firms, Arthur Andersen was Enron's auditing firm which means, Andersen's job was to keep a check on company's accounts and its fair functioning.

All the documents connected with the collapse of Enron were destroyed by Arthur Andersen. Early in 2002, it was revealed that documents were destroyed in October 2001 after the world woke up to the fact that Enron's accounting was faulty and would be investigated. This brought bad publicity to Enron as well as Arthur Anderson.

Arthur's did not keep Enron's Board aware of its concerns until 2001 (Hosseini & Mahesh, 2016). Enron was at important risks that were not considered for public but were known to Duncan and others at Arthur Andersen in early 2001. There is also the issue of the 1.2 billion dollars' entry (debit) to notes receivable and entry to stock equity (credit). It is not allowed for anyone to record an increase in stock equity balanced and promises to pay the amount in the future according to accounting principles. It is not acceptable in accounting to record the increase in stock equity, but it is not considered as a big crime. Why was Arthur Andersen fooled? The true nature of the transaction was hidden due to complexity of SPE until 17 October 2001. We cannot rule out the possibility that Arthur Andersen were glove in hand with Enron and knowingly allowed the faulty entries. It is debatable It is more likely that the complex manner of structuring the transaction hid the transaction's basic nature, even to Arthur Anderson.

At what stage Arthur Andersen should have urged to demand to draw the curtain on the Raptors or the predators? There was no significant accounting issue concerned with the Raptors before the decrease in value of assets held by Enron. Raptors could no longer put their honors to the liabilities of Enron were known to all. We do not know when this happened, but it was somewhat before October 2001. The stocks equity held by Enron were not effective now should have been informed to high official at Enron.

There are many important issues related to the recording of debt, the timing of revenues, the timing of expenses, where the possibility of the assets not being actually sold is more.

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Arthur Andersen had to face the trial in the court of public opinion where they were found guilty even before the legal trial took place. After Arthur Andersen was found guilty even before the actual legal trial by court of public opinion, then after many public corporations restrained themselves from hiring Arthur Andersen as its auditor. Even CFOs did not defend Arthur Andersen as the firm's auditor after its name was already defamed in public especially after it was found guilty by public opinion court. Hence Arthur Andersen was dissolved and shut down and later on the actual fact came out and it was found that Arthur Andersen was considered not guilty but still it did not help the already dissolved firm. (Alexander et al, 2002).

It is possible that the accounting errors made by Enron were not Arthur Andersen's responsibility and that, aside from shredding, no crimes were committed by Arthur Andersen before 2001.

### **Employees and Pension Fund Holders as a Victim**

Thousands of people were left jobless due to collapse of Enron and many lost their personal investments and pensions and it had even left thousands of employees out of their work such as many employees who had personal pension funds made out of Enron shares, a very common scenario in America, where occupational schemes based on final salary payments are increasingly rare then the money purchase schemes, which are the norms. The company prohibited its employees from selling the stocks, and when the share price decreased and company's destiny became clear then in contrast, many Enron's senior officials themselves sold their share in return of cash.

### **The main causes for Enron's bankruptcy**

#### **Truthfulness**

According to Kirk Hanson, the executive director of Mark Kula Center for Applied Ethics, the truth about the condition of the company was ignored by the management. Kirk was of the opinion that Enron had to save their face value and reputation by being the best in everything it does (Hosseini & Mahesh, 2016). About the probable rise in stock price and selling of the share, there is no confirmation that the CEO of Enron told his employees about the shares value. Shareholders came to know about the sale of shares by the CEO only after investigation regarding the bankruptcy of Enron was carried out otherwise as per the normal norms the employees as well as the shareholders would have never known regarding the sale of stocks by CEO for several weeks (Li, 2010).

### **Accounting system scandal (using “mark to market” and SPE as tools)**

#### **Mark to Market as a tool**

Enron, being a public firm was subjected to many external sources of governance that includes regulators of government, and many private entities such as auditors, equity analysts etc. (Hosseini & Mahesh, 2016). Here we will focus and discuss only the main mechanisms. According to this method once a deal or contract was signed, the present value of the anticipated future value of the asset would

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be recorded in the current financial book. The traders at the firm were forced to predict the low discount rate and high future cash flows on the deals signed with firm in order to satisfy the investors to show consistent profit for the company. The net present value recorded by Enron in its financial book may not have taken place in future but still the calculated difference between the net present value and the originally paid value had to be considered as the firm's profit in its financial book. (Li, 2010).

### **SPE (Special Purpose Entity) tool**

Use of SPEs allows the firm to eliminate SPE from its financial book statements if it has the full dominance over an independent party or at least 3 percent of the SPE is owned by them. Enron was very desperate to hide its debt as high debt would have alerted the investors and the sources of loans, that is banks. So due to this reason, Fastow, who controlled and headed the SPE borrowed large amount of money using stocks of Enron as collateral. Hence, the SPE allowed Enron to convert its debt and loans into income by overvaluing the books of account of Enron's financial report. The shareholders were in dark and were taken for a ride. (Li, 2010).

### **The Extent of Corruption**

Was Enron corrupt? How evil was the Enron management to look away from such ghastly human tragedy?

When Arthur Andersen and Enron knew that investigations against them were pending, they shredded their documents. And huge amount of money was taken by Fastow and other senior officials of the company from the several related entities. While upsetting, these actions were not the core elements of Enron's bankruptcy. The SPEs were established and were utilized for hedging the accounting and the financial purposes for these entities. The accounting, economic and several other problems came into being when the losses became large. It is interesting that the accounting for Chewco would have been technically acceptable (if not admirable) if an additional 7 million dollars of independent equity had been raised. These were not consistent with the traditional objectives of financial accounting, but they did not indicate any thing about the existence of corruption. No one guessed that Lay and Skilling were not paying much attention to the accounting and financial entries in details which at that point of time was most important and desirable thing to do. Although clever, Fastow failed to consider the consequences of a severe fall in the value of the merchant assets and the value of the SPE's assets. Fastow had established a house of cards which could not even withstand a little breeze. The auditors and the CFO of Enron did not keep the Board adequately informed. The investment banks and commercial banks and several other related banks helped Enron to raise the capital for Fastow to play his games.

After the investment banks had some idea that there was some problem with the accounting and financial details then the Analysts advocated about the Enron stocks. This could be an illustration of the analysts saving out the investment banks or it could have been that the wall between the investment banking and security analyses actually worked.

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## **Damaged and Misplaced Loyalties**

Top level management at Enron were loyal to themselves and to the top leadership. Very little thought was put into the interests of stakeholders like shareholders, foreign governments, local communities etc. Employees seemingly trusted Lay's hopeful approach for the company (Johnson, 2003). The sense of betrayal felt by Enron's employees increased their pain of losing jobs and retirement savings as they were regularly betrayed by their own top management officials.

## **Irresponsible Behavior**

Enron top management officials reacted very negligently by failing to take required course of action, to conduct genuine oversight, and to shoulder liability for ethical blooper of the firm by failing to take required course of measures to maintain the ethical status of the firm (Johnson, 2003). Some board members at Enron did not recognize the proceedings or working operation of the firm as the then CEO Lay down played them with financial corruption warnings. Many a times it happened that the top officials use to leave their employees on their own to take required decisions and encouraged them to earn profit and increase the number for the company by any possible means by which they can. But then after the collapse of the company none of the top officials came forward to accept blame for what had happened.

## **Sharing the Blame:**

Finding out the entities who can share the blame for the collapse of Enron have resulted in the formation of long list that includes:

1. The transactions that were not understood were still carried out and not stopped by the top level Enron's high official management and board (maybe they did not know about it).
2. Investment, commercial banks and other banks for not identifying the pitfalls for Enron associated with complexity and large amounts of leverage.
3. Of all dispute of interest in situations, the law firm did not inform the Enron's high official management about it.
4. Rating agencies and security analysts that did not insist on better updated information.
5. The auditors seemed to be too permissive.
6. Many of the transactions that can be condemned were initiated by the CFO.
7. Investors who paid too much for the stock (hindsight helps us with this one).
8. The hiding of the debt at Enron was initiated by the designers of the accounting rules.

## **Moral Responsibility and ENRON'S collapse**

### **How Top Managers Were Responsible**

The individuals who must be seen as the main bearer of moral responsibilities are: Lay and Skilling who allowed Fastow, to secretly build a private institution for illegal transfer of property. In turn

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Fastow, performed the crime of wrongdoing by breaching the professional ethics. Thereafter, Lay and Skilling, ordered the less famous or displayed employees to perform the unlawful act, then these employees are also morally responsible for their unlawful deed (Pasha & Seid, 2006). But it's quite clear from all the facts that came up that Enron senior management's moral compass was definitely misplaced. The harm to the company face value and reputation has already been done through a negative recognition of corporate ethics. Arthur Andersen violated its industry specification by being part of this corrupt deed.

### **How Corporation Was Responsible**

The corporation acts for managers are assigned to the firm as long as the managers continue to perform conscientiously within their boundaries. The entire corporation cannot be held responsible for the fraud as the shareholders and other investors of Enron were misled by the false hike in stock price and had no idea about the unethical undercurrent. But one must say that if the board and shareholders of the firm had looked into the decisions made by the chief executives and those important employees more closely and clearly, then ENRON could have avoided this debacle.

### **Conclusion**

The top most management at Enron misused the benefits as well as the power. It exploited the correct data and at the same time were appealing at odd therapy of external and internal constituencies (Johnson, 2003). These selfish leaders gave priority to their own interest over others and miserably failed to put forth their responsibility that ultimately led to Enron's bankruptcy.

Therefore, there is a need for the directors and other key member of different corporates to follow particular examples in following matters:

**Firstly**, in any company there should be a well-designed and well-organized corporate culture. But in this case, the firm's working environment and its culture played the lead role in the collapse. Enron's top management was very high in achievement orientation. They had an unfailing belief in their ability to be industry disruptors and trend setters. However, somewhere along the line they turned their focus more on the ends and less on the means that they adopted. Perhaps, they also had a misplaced belief that they will be able to turn things around and make money for all the stakeholders (Sims & Brinkmann, 2003). When the company failed to perform and losses became evident, to protect their reputation and image in the market they started focusing on to cover the losses they faced instead of focusing on how to make everything right. They succumbed to the pressure of keeping up the pretense of running a good show. Therefore, the directors and board members of any company should pay more attention to adopt transparent and conscientious practices, especially when things start looking bleak. There have been innumerable examples of such ethical lapses since Enron. In the Indian context, the most spectacular example was the Satyam case, where Raju admitted that that *“it was like riding a tiger, not knowing how to get off it without getting eaten by it”*.

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**Secondly**, to have the full information about the working operation of the company, one has to get a more secure system to advice and supervise its management and executives. The board of directors and even the top management authorities should keep an eye on not just the behavior and actions of its employees but also on how money is being earned and reported. In response to the Enron debacle, Sarbanes Oxley Act, 2002 was legislated, revamping the role of regulators as well as introducing a heightened sense of responsibility to be assumed by the management.

**Third**, Skilling and Fastow used “**Mark to market**” accounting method to hide the losses and to push the Enron's stock price was not just immoral but also illegal to gain in a long-term period. Later, US Exchange Commission gave permission to Enron to use “mark to market” method of accounting which lead to the final scandal. Hence, an accounting regulatory body should be careful in allowing creative methods of accounting. People doing business should be focused and give more importance to business ethics. Had the whistle blower come forward sooner in the Enron case, many repercussions of this debacle could have been averted.

It is worth mentioning that after Enron scandal corporate executives are more careful about tampering with accounts that might be inaccurate (Hosseini & Mahesh, 2016), which would lead them to face criminal liability as a direct result of introduction of the Sarbanes Oxley Act, 2002.

Unfortunately, the issues that plagued stakeholders continued to two decades after the Enron scandal. It is sad to note that the corporate world has learnt very little from this experience. The important question is that are we ready and trained enough to share this tragedy of this corporate scam to our young managers and expose them to these malpractices so that in future they will always be aware to avoid these fraudulent practices.

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# The Role of Knowledge, Policies, and Behaviour in Understanding Consumer Preferences for Energy Efficient Products

**Aman Deep**

PhD Research Scholar-IIM Shillong  
Email : aman.phd20@iimshillong.ac.in

## **INTRODUCTION:**

The worldwide oil calamity in the 1970s and subsequent environmental issues put forward the energy conservation program as a main concern globally. Hereafter, human impact on the environment needs instant attention, and energy conservation practices put forward a time and cost effective answer to lower air pollution and CO<sub>2</sub> (International Energy Agency, 2016). Residential energy consumption contributes to 30 % of the global energy consumption and the same will be increased with the urbanization growth, population, and lifestyle change. The more and more need for electricity is placing further stress on upstream scarce energy resources. According to global studies, dwellers in developing countries are now living a comfortable lifestyle, by utilizing a new electrical domestic device such as room heaters, refrigerators, and air-conditioners, which is also a key driver in the increase in energy consumption in the residential sector (Norzalina et al., 2014).

The recent, Paris Climate Conference (COP21) agreement set out an action plan to avoid the increase in global average temperature to below 2 °C. To attain this objective, energy consumption and greenhouse gas emissions must be minimized globally (Maria et al., 2017). Although consumer awareness about the environmental concerns and need for environment-friendly practices has started. Yet even with adequate knowledge of energy-saving methodology and a desire to do so, many consumers still fail to take obvious steps towards energy efficiency and conservation (Elisha et al., 2015). The first purpose of this term paper is to examine existing empirical research and identification of the consumer preference and barrier for energy-efficient and energy conservation products in the context of knowledge, policies, and behavior. The second purpose is to develop a hypothesis to

## **SELECTION OF ARTICLES:**

Articles were selected through an online search of keywords in the abstract, heading, and keyword segment of the journal database. These words were used: energy efficiency, energy label, energy conservation, energy saving, green purchasing behavior, and green consumption. The period of 2010-20 has been considered for the journal search.

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## **LITERATURE REVIEW:**

Traditional economic theory suggests that human decision-making and behavior are based on purely rational choice while a growing body of scientific research exhibits that the rational decision-making sense are rare in people and they are largely driven by cognitive biases, heuristic and other predictably irrational tendencies (Elish et al., 2015). One, an important requirement for rational decision-making in the sphere of electric products is energy literacy, which can be defined as an individual's ability to make informed and deliberate choices in the domain of domestic energy consumption (Julia et al., 2019). There is also empirical evidence of the impact of energy consumption practices in babyhood and early adulthood on later energy consumption habits. It is also presented that growing up in a household with more financial resources has a propensity to consume more energy for hot water and heating later in life (Ander Rhiger, 2018).

Most of the studies used the theoretical approach proposed by the theory of reasoned action (TRA) and theory of planned behavior (TPB) to recognize and predict behaviors and some of the studies determined consumer green purchase behavior by extending the theory of planned behavior (Rambalak and Govind, 2017; Shih-chih and Chung-wen, 2016; Jana et al., 2020; Deepak and Rishi, 2018). Additionally, social cognitive theory, states that behavior is influenced by environmental factors and personality and determined by personal factors (demographics, knowledge, and attitude) and environmental factors (Muhammad et al., 2020).

Energy labels (or Star rating) provide thorough and trustworthy (external certification) details to reduce asymmetric information and ambiguity in expected returns on energy savings, while likely lowering the cognitive cost of the decision-making process upon the purchase of energy-consuming products. The major aims of the energy label programs are to lower energy consumption and enhance the energy efficiency, but studies state strong confirmation of the latter (Cristian et al, 2020). The Big Five personality model (or OCEAN ) advocates that these factors (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) capturing an individual's personality, and the foremost personality trait showing a positive relationship with people acceptance of the biogas plant are openness to experience and locus of control. Individuals with a higher level of openness to new experiences trait are more likely to accept new technology (Pan and Marcella, 2017).

## **ROLE OF BEHAVIOUR:**

Energy-saving behavior is defined as individual attempts to reduce overall energy use. Amongst the four determinants of energy-saving behavior, the degree of concern exerts the strongest influence followed by a sense of responsibility, knowledge about energy issues, and perceived energy-saving control (Myat and Dan, 2020). The suggested instrument for the change in energy-saving behavior includes modifying market costs, economic incentives, and other non-monetary behavioral

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interventions or ‘nudges’. The nudges and incentives are popular in electricity demand management (Anant Sudarshan, 2017). Due to the intricacy of energy behavior, they are usually studied from a variety of areas such as sociology, psychology, and engineering with both quantitative and qualitative approaches.

A major barrier to green consumption behavior is an economic constraint, choice of product, availability of a product, quality issue, lack of information, and cynicism while the major drivers are emotional affinity towards nature, personal circumstances, values, ethical belief and personal norms (Lay et al., 2016) and the impact of energy star labelling on the appliance is positive but consumers give price attribute a high importance, which further concluded that rebate programme on the energy efficient appliance will have positive impact on consumer price decision (Sung-Yoon et al., 2019). Energy saving revenue from the energy efficient residence<sup>1</sup> and incremental cost generation for the same is the key factors for the purchase decision of buying an energy efficient home or not (Jun-Jun et al., 2019).

Energy and investment literacy has a positive and significant effect on the option of investment calculation as the decision approach in energy efficient products. Furthermore, displaying annual electricity expenditure of appliances in approximate annual electricity charges (monetary value) rather than in energy consumption (kwh/units) enhances the chance that consumers carry out an investment analysis and recognize the highest (costwise) energy-efficient piece of equipment (Julia et al., 2019). The direct reduction in the electricity bill of consumers might be regarded as prime motivation for the consumer for the purchase of energy-efficient equipment, but there are other benefits also such as poverty alleviation and subsequently increase of disposal income (Singh et al., 2018).

Research exhibits that residential savings and investments are considerably affected by decision-making power between male and female members. And females exhibit a higher electricity-saving attitude and their involvement in the purchase decision-making process has supplemented efficiently in the electricity-saving of residences (Shrestha et al., 2020).

**Variables:**

Consumer green purchasing behaviour, energy consumption, green purchase intention and behaviour, behaviour intentions, intention to buy green products, behaviour intentions to use green products, green consumerism were found to be major dependent variables.

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Environmental awareness, Environmental knowledge, Consumer attitude, Social norm, Personal norm, degree of concern, Perceived consumer effectiveness, environmental concern, incremental cost, energy-saving revenue, green altruism were found to be major independent variables.

Different moderators' variable has been used to assess the impact on the other variables.

### **ROLE OF KNOWLEDGE:**

The majority of researchers advocate that environmental-related knowledge may have a positive effect on consumer green purchase intention and green purchase behavior. However, results on the significance of knowledge are incoherent, and an increase in environmental-related knowledge does not necessarily lead to environmentally friendly behavior. One can argue that an elementary understanding of environmental-related issues might not be sufficient to encourage sustainable practices. Moreover, the extant methods of disseminating the information related to the benefits of usage of environmentally friendly products have shown an inability to pass the message to consumers. The role of the issue of understanding the perplex energy label related information cannot be neglected (Joshi and Rahman, 2015).

### **Role of Policies:**

Investment in terms of energy efficiency improvement has several long-lasting, circuitous effects such as economic growth and new employment opportunity. Therefore, energy efficiency improvement policies can have impacts on another dimension also, such as energy conservation, new technology growth, and prices. Strong political vision and commitment for the implementation of energy efficiency policies with a top-down approach and involvement of public institutions, business sector, civil society organizations, and media influence the consumer attitude towards energy efficiency (Vesna and Slavica, 2013). Citizen preference for future energy-related policies at the national level could include these major significant outcomes as a) environment quality, b) decrease in electricity prices, c) employment creation, d) Greenhouse gas emissions (Mark and David, 2018). Bush et al., (2020) proved that favorable regulations and external financial enticements are not always enough to enact major transformations. Both, local and national government enterprises should become more involved in various awareness-raising programs through different public and private educational initiatives.

### **CONCLUSION:**

It is important to understand that any type of green endorsement in marketing exercise may enhance consumers' green purchasing intentions in the short run only. But these endorsements tend to decrease consumers' real importance for the environment, which can subsequently reduce their green purchasing intention. Therefore, organizations must accept requisite methods to create consumers'

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attention and emotions for the environment. More specifically, the purpose should be to generate consumer's self-interest in green products instead of enticing them with another external reimbursement (F Ali et al., 2020).

Foremost environmental issues and reduction in natural resources compelled individuals to focus on environmentally friendly consumption practices. Production of environment-friendly products has been increased and consumers are keen on the utilization of these products. Numbers of consumers are willing to spend more money on environmentally friendly products. Though, several research studies report that consumer favourable attitude for these products do not convert into real buying activity and the majority of the consumers do not buy these green products.

Most of the study's concentration was on the young generation and urban dwellers, further investigation of the rural area is also required to get conclusive results. The majority of the studies reported the self-reported behavioural measures, hardly any study was found based on actual buyer behaviour. Future research can be conducted with the consideration of the actual purchase behaviour of the consumer.

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# PERSPECTIVES

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# Application of Big Data Analysis in Managing Supply Chain: Reference to MSME's

**Veerendra Anchan and Dr Manmohan Rahul**

<sup>1,2</sup>PhD Research Scholar- Sharda University

<sup>1</sup>veerendraanchan@gmail.com, <sup>2</sup>manmohan.rahul@sharda.ac.in

Operations and supply Chain Management (SCM) deals with a broader area that covers both manufacturing and service industries. It involves various functions of materials management, demand forecasting, retail management, operations planning, distribution, logistics, retail, demand, forecasting, order fulfilment, and many more.

SCM attempts to centrally control or link the assembly, shipment, and distribution of a product. Companies are able to cut excess costs and deliver goods to the consumer quicker by controlling the supply chain. This is often done by keeping tighter control of internal inventories, internal production, distribution, sales, and thus the inventories of company vendors. SCM is based on the concept that every product brings market results from the efforts of various organizations that make up a supply chain.

While supply chains have existed for years, most businesses have only recently paid attention to them a value add to their operations. Green supply chain and sustainability is also emerging and many organizations are now finding alternative ways to attenuate environmental hazards. In case of small and medium-sized enterprises, they tend not to give too much importance to environmental management practices and so their performance is low with reduced environmental impact because of waste reduction, and low carbon prints. Also, SMEs have almost no sustainability goals and practices. SMEs also consider environmental measures as expensive albeit cost reduction benefits are highlighted to them. A large percentage (95%) of SMEs aren't aware that environmental practices and sustainability can improve operational efficiencies, reduce costs and risks and supply new opportunities. Hence SMEs are considered to be the main problem area within the field of environmental regulation. If SME's adopt green supply chain management processes then they can get greater insights by using Big Data Analytics which is currently utilized in many of the Operations and supply Chain processes.

Big Data Analytics can analyse vast volumes of data to identify hidden trends, associations, and other insights. With today's technology, you can analyse the data and get answers sooner with more conventional business intelligence solutions. Big data has been around for years; most companies now realize that if they collect all the data that streams into their industries, they can apply analytics and gain substantial value from it like discovering insights and patterns.



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The research by R.P. Mohanty and Anand Prakash illustrated the application of SEM (Structural Equational Modelling) to know the GSCM practices concerning MSME in India. Structural equation modelling is a multivariate statistical analysis technique used to analyse structural relationships. The researchers identified 4 alternative models for Path Analysis and different endogenous and exogenous variables were created within the 4 models with each model parameter having the chance of getting estimated independently.

Diabat and Govindan studies on implementation of green supply chain in one the aluminium company in southern Indian. The methodology of Interpretive Structural Modelling is employed. The advantage is getting a clear and a well-defined model. Data are often sourced in several formats like web, social media, ERP systems, cloud platforms etc. and that they are often either in text, video, audio formats. To read and analyse this data, different terminologies like web analytics, text analytics, social analytics, network analytics, multi-media analytics are utilized. For processing, Apache Hadoop, Dryad and Pentaho Business Analytics are used as processing platforms (Tsan-Ming Choi, Stein W. Wallace, Yulan Wang).

Machine learning is also one such modern technique which is well highlighted in big data analytics and with the assistance of machine learning techniques like neural networks, support vector machine and statistical machine learning, greater insights are often achieved in operations and supply chain management. Optimization and Forecasting also are few of the methodologies utilized in Big Data Analytics for decision-making in supply chain. Mahya Seyedan and Fereshteh Mafakheri investigated the predictive Big Data Analytics applications in supply chain demand forecasting to propose a classification of customer behaviour analysis, trend analysis, and demand prediction.

The researcher classified this algorithm and their applications in supply chain management in to time series forecasting, clustering, K-nearest neighbours, neural network, multivariate analysis, support vector machines, and support vector regression. The neural networks and multivariate analysis is used for getting good results. Also, the review concludes that how operations research techniques in association with Big Data Analytics can efficiently improve the business insights and decision making for the complex supply chain. Larger and sophisticated data is easily tackled by various analytical techniques in operations research and big Data Analytics.

### **FUTURE PROSPECTUS:**

There is an increasing scope for MSME globally to check whether the manufacturing is changing their focus from traditional to green supply chain. Issues like sub-supplier management, behavioural /individual issues in sustainable supply chains, barriers and enablers and evaluation of sustainable supply chain implementation are also emerging.

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Future research must utilize actual data from industry practices rather than merely counting on subjective opinions of respondents. The incorporation of real business data, practitioners and academicians is likely to help solve both practical and theoretical development. This might occur more frequently as practical and normative modelling continues to develop within the green supply chain management field (Fahimnia, Sarkis, and Davarzani, 2015).

Informal modelling of greens supply chain management with practical applications are also a probable area of future research. Big data analytics in supply chain management are often used to understand demand forecasting under uncertainties, to improve collaborative performance among partners in supply chain network, to enhance product quality and eliminate defects, to increase supply chain agility, adaptability, robustness and alignment and to enhance supply chain resilience.

The utilization of big data analytics though remains an under-explored area. It'll be promising and challenging to see how big data analytics are often applied for critical issues like strategic partnership and channel coordination in supply chain systems. The utilization of big data analytics is also related to many issues like data privacy, threats to human and welfare. The study in these areas is required to ensure that proper rules are imposed to make sure that the utilization of big data analytics is ethically sound and can contribute positively to society.

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# Can Student Placement and their Initial Working Duration Impacts Institute Credibility? Using Design Thinking and Systems Approach to Prepare Better Students

**Saurabh Singhal**

Research Scholar-IIM Shillong  
saurabh.phd20@iimshillong.ac.in

## **INITIAL CHALLENGES POST CAMPUS PLACEMENTS**

The challenge currently faced by the engineering or management colleges is the impact on the credibility of institute as students placed with a firm during campus interview won't serve the firm in some cases more than six months or in another cases leave post one year for better opportunities.

This may or may not impact the candidate in the long run, but it impacts the institute in terms of brand, credibility and trustworthiness. The potential recruiting companies may think that students from so and so institute do not stay put for a longer time hence let's avoid this institute for subsequent campus-placement opportunities.

## **SYSTEMS APPROACH**

When one applies the system approach in totality, one can discover that the placement of a student happens because of a wonderful ecosystem working beautifully in the college comprising of learning & development opportunity along with soft skills training and an efficient placement office. This overall system fulfills the objective by enabling the college and empowering the students to go through the selection process with confidence and get placed with flying colors.

## **DESIGN THINKING**

The real problem may not be what it appears to be prima-facie. On one hand we may think that a candidate has left the organization whereas the actual problem will be clear if we empathize ourselves into the situation. As education is not a stand alone activity rather is a part of larger ecosystem wherein stakeholders are not just the student or candidate rather there are others associated to student likewise it is not just the institute imparting that specific stream of course rather there are other stakeholders from that end as well.

The more we try to analyze the problem it goes into design thinking loop which involves observing the problem closely, reflect on it by relating it with current situation and trying to improve the condition by

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solutioning it as by making it will ensure that with every iteration of design thinking loop situation should improve.

### **1) Observation**

What is that which drives a student to accept the offer and later once he/she joins an organization they leave in a short span of time. Many factors which influence this decision, some of them could be:

- (a) Accepting the offer during campus-placements in a haste or just to meet the numbers of placements tally
- (b) Realization post-joining that the work they are doing is not something which is of interest to them
- c) Monetary factors the paycheck also drives such decisions as the urge to increase the emoluments and benefits make people switch

### **2) Reflections**

Over a period, the market condition from the perspective of business organizations is something which symbolizes a deep war for good talent, be it at entry level, lateral hires or for leadership roles. The problem statement is for fresh graduates / post-graduates who are fresh out-of-campus and are making frequent switches hence diluting the brand of institute they studied at.

If it is a good talent, even the organizations don't hesitate to poach the candidate from their competitors or from open market.

### **3) Solutioning**

Coming together of all three parties involved will be a steppingstone to achieve a consensus. As the hiring organization can sensitize about the challenges faced by them in re-hiring in case a campus-hired candidate leaves abruptly, they can explain about the time, efforts and financial investment to be done by them again due to such exits. The institute can put across their point regarding the brand of institute as well as the goal to have a sustainable long-term relationship with the recruiting organization. The candidate can also explain his/her point-of-view and share the inclination towards the work profile so that none of the placement happens just to meet the placement score card. And, the student must be told firmly in a transparent manner that any act of accepting an offer made at campus just to use that as a fit-gap placement shall not be appreciated and will be closely monitored.

The ideation of such meetings will result in collaboration amongst all and will result in sort of accountability by the stakeholders towards each other. It is a well-known fact that many companies offer two-months summer internship and six-month hybrid placement programs wherein a student joins an organization in the final year of course itself to have an understanding about the work expectations. Off late it has been found that internship opportunities are also reduced to just aim for

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converting them to Pre-Placement Offers (PPO's) and meeting the placement score cards. The very purpose of testing the waters before the boat is placed in the real waters is getting defeated.

Another attempt which could be made is to offer the campus placement with probation period of two years and confirmation only after two years with restriction on resignation during probation period. There can be some terms & conditions to consider exits under exceptional scenarios but will discourage candidates from hopping the jobs.

Moreover, in the long run, the candidate may not be answerable to institute or to employer but to self-conscious.

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# NPA - in the Context of Indian Banking Sector

**Shruti**

PhD Research Scholar- Sharda University,  
2020401997.shruti@dr.sharda.ac.in

When a borrower is unable or unwilling to pay the amount of the loan or its interest, then the loan is known as a non-performing asset or NPA.

In other words, when the components of a loan are not serviced by the borrower, as the loan provided by the bank is an asset, so the amount of loan becomes a non-performing asset. The asset that fails to earn a return for the investor for a certain period of time is called NPA. The stipulated time period for an asset to be considered as NPA is 90days.

## **Classification of NPA-**

1. Substandard asset is an asset that is considered as NPA for less than or equal to 12 months.
2. Doubtful asset is an asset that is considered as NPA for 12 months.
3. Loss asset is an asset that is considered as NPA for more than 12months.

## **Impact of NPA-**

- Lenders suffer a lowering of profit margins.
- Higher interest rates by the banks to balance the loss by NPAs
- Investors do not get fair returns.
- NPA related cases add up to the already pending cases that are piled up.

## **Various steps taken to tackle NPA-**

In 1991, Narasimhan committee recommended several reforms to tackle NPA. They are as follows:

The debt recovery tribunal (DRTs)-1993 - The reform is governed under the provisions of banks and financial institution act of 1993. The main motive behind this act was to reduce the time frame for settling the cases of NPA.

- 1. Lok adalats-2001-** They are mainly concerned with the recovery of small loans, they are limited to 5lakh rupees only according to RBI guidelines.
- 2. SARFAESI act 2002-** The act stands for Securitization & Reconstruction of Financial assets & Enforcement of Security Interest act. The secured assets are acquired and disposed by the banks with the unpaid amount of 1lakh and above without indulging the court under this act.

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**3. Asset Reconstruction companies (ARC)-** The motive behind this act was to unlock value from stressed loans.

**4. Corporate debt restructuring 2005-** Under this the rates paid are decreased and the time the company has to pay back the obligation is increased. Thus reducing the burden of the debt on the company.

**5. 5:25 rule- 2014-** The 5:25 rule or flexible structure of long term projects loans such as infrastructure. These projects have a longer timeline and they do not get money back for a long time, thus it was proposed to maintain cash flow of such companies.

**6. Mission Indra Dhanush- 2015-** To improve the overall performance and revamp the public sector banks -ABCDEFG nomenclature was used to describe various terms:-

**A- Appointments-** Separate post of chairman, MD and CEO will be designated.

**B-Bank Board Bureau-** BBB consists of reputed officers and intellectuals.

**C-Capitalization-** A buffer of minimum capital is required to be maintained under the norms of Basel 3.

**D- Distressing PSBs-** To improve the measures of risk control and NPA.

**E-Empowerment-** The decisions are taken by the bank individually without any consultation from the government.

**F-Framework of accountability-** Key performance indicators (KPI) are associated with the performance.

**G- Governance reforms-** Transparent and meritorious appointments in PSBs by BBB.

**8. Asset Quality Review 2015 -** Under AQR, provisions are made for stressed assets to protect the interest of the banks.

**9. Insolvency and Bankruptcy code act 2016-** Under this act, the interest of shareholders are considered and changes are made to improve the credit facility of the banks and their entrepreneurship.

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**10. Bad Banks 2017-** The problem of stressed loans are considered by forming bad banks that are going to be governed by the flexible rules.

### **Raghuram Rajan's viewpoint on NPA-**

Dr Raghuram is a known intellectual in the world of finance. His views are held in financial world with much respect and awe. He taught in an American university for long time before he was invited to take over as the Governor of reserve bank of India.

Dr Rajan, remained in the office as Governor of the Reserve Bank of India (RBI) from September 5, 2013 to September 2016, He discussed NPA ND ITS roots in great detail. Some of the points given by him are:

- 1) The period of 2006-08 was beneficial for the economy as significant projects were completed within time and budget. These past performances affected the due diligence of future projects.
- 2) When banks started to write down bank debt and promoters brought in more equity to avoid the threat of losing their project, the bank helped promoters in paying their dues by advancing more loans to them and pretending that it was performing. The profit shown by the bank was illusionary and no interest was actually coming in reality.
- 3) Initially DRTs and SARFAESI were successful but later promoters found their way to game them.
- 4) RBI has pulled on their socks and initiated by giving power to the banks. To identify the working of every loan that are above 5crore, a large loan database was formed.
- 5) To end forbearance, ever greening of projects was stopped by the banks.

### **What happened in the 2015 Asset Quality Review?**

- Banks were not recognising bad loans in order to ever greening the projects and denying the loss they were going through. As different banks were following different norms thus a loan that was non performing in one bank was performing in another.
- It was the need of the hour to clean up the bank as soon as possible to resume credit. But banks have not made enough provisions for the loans that were non performing for a long time.
- During August-November 2015, RBI conducted a balance sheet check of random banks to examine the status of their asset quality. The report generated from these inspections was called Asset Quality Review.
- RBI has given time to banks to classify their assets according to the risk they possess. This helped in bringing out the actual financial position of banks as banks were hiding bad assets with the help of forbearance.



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### **Post effect of AQR-**

- After conducting AQR by RBI, losses were piled-up in the banking sector, the aim was to clear the balance sheet of the banks.
- Public sector banks were the most affected whereas in private banks only ICICI bank and Axis banks were affected.
- The losses recorded by large lenders were- Bank of Baroda (Rs 3230 crore), PNB (Rs5367 crore), IDBI (Rs 1376 crore) and many more.
- The impact of AQR was furthermore as provisioning required for standard assets were increased from 0.4% to 15%.

### **Vijay Mallya's case of NPA-**

Vijay Mallya (VM) was a known industrialist of India and owned major manufacturing units. He was also appointed member of upper house because of his credibility and work. He was given a loan of Rs 8040 crore in 2004. The loan was advanced in the name of Kingfisher Airline (KFA) but it was believed that that VM siphoned off the money to buy properties and various teams in Formula 1 track team , cricket team , across the world.

Mallya currently owes more than 9000 crore to 17 banks and major money to SBI who is the leader of this consortium of banks. The loan was advanced to KFA on the basis of the brand name that the company possessed at that time rather than having secured assets on these loans.

Even after this Mallya managed to get 900 crore loan from Industrial Development bank of India in 2009 despite warning from some of its officers. The loan that was taken in 2004 was declared NPA in 2009 and was restructured in 2010.

Today , there are 9150 wilful defaulters of state owned banks that have amounted money to the tune of Rs 85258 crore. Under SARFAESI act, action is taken against 6207 wilful defaulters.

Banks are still making losses despite taking various actions as these steps have led to the recognition of losses that were mounting for a long time. Now the provision is being made for the future projects but that will not compensate for the losses that were made in the past.

### **CONCLUSION-**

The current scenario of Indian banking system is worth our attention. The pandemic and national lockdown has affected the situation of NPA. Private and public banks are expecting a growth in their bad loans and banking industry is expecting a loss of value of financial asset over time. To overcome the situation, they have to provide for the defaulters from their end.

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RBI has predicted a gross NPA of 12.5% in the month of march this year(2021). It was expected that the situation will be difficult due to the pandemic but the actual figures are bit higher than the expected figures. The moratorium expected from both private and public banks was quite high. Even NBFCs has given 49% of moratorium to their customers.

Though the situation of public banks was still better than private banks in the initial period of 2019-20, the situation got worsened for both sectors due to covid-19 pandemic.

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## Shhhh... Listen! Do You Hear the Sound of Social Stigma?

**Cheshta Arora**

Special Educator and Family Therapist

Email : the.toss@outlook.com

Society says “Be yourself” and the moment we try to explore our individual selves the same society immediately corrects us by saying “No, not like this”. It's relatable, right? We are the members of the society yet the moment we paraphrase 'society', a hair-line difference starts to emerge between us and the society resulting in discrimination and blame. It seems that there exists a gap between the society and us. This attitude gives rise to a “we versus they” ideology which further exhibits a socioeconomic hierarchy in the society.

There have been numerous instances where society becomes an indispensable factor while taking important decisions of our lives. In some parts of India, it even starts much before the child is born. The discrimination includes but is not limited to gender discrimination. Society becomes the dominant variable in defining the rules of what to expect from others. The number of questions thrown at the decision maker are countless. The wide range of topics on which an individual is judged on daily basis other than sexual discrimination, fall under the umbrella terms like career, marriage, sexual preference, outer appearance, safety and gender specific roles, to name a few.

To dig deeper into it, let us frame some concerns of the society. “Do you know they are living in the live-in setup and don't wish to marry at all?; You know you should be married by now and have children, isn't your biological clock ticking?; Why can't you take a break from your career to be available for your family; You are a single parent, it will be tough; Are you on medications to overcome homosexuality; You shouldn't wear clothes which invite rape; Control your wife and be a man; Stop crying as boys don't cry; You are seeking professional help from the therapist, are you mentally unstable?”

We all have heard most of the above-mentioned statements at some point of our lives. Some of us may have been at the receiving ends as well. Are these merely statements? Is it appropriate to say that “Log kya kahenge” (what people might say) is our defining statement even in 21st century? The answer is NO. These are not just the statements said by some people around us, rather these monologues convey vital information about the about the collective mindset of the society. It depicts the deep-rooted beliefs, customs, taboos, myths and realities in the guise of cultural values and societal norms, which in today's scenario can also be known as social stigma. Understanding social stigma is simple because but we all have experienced it in varying degrees. We are the living examples of how these social stigmas put us into the typical closed box. Most of us fail to decipher the difference between social stigma and social norms. We get accustomed to hearing these utterances where everyone is free to give remarks on

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what to do and what not to do. The painful truth is that we are at the giving as well as the receiving end of this conundrum. Therefore, it won't be wrong to say that social stigma engenders stereotypical behavior.

To decipher the precise meaning of social stigma, I am lending the words of Goffman (1963) who defined a stigma as an attribute, behavior, or reputation which is socially discrediting in a particular way: it causes an individual to be mentally classified by others in an undesirable, rejected stereotype rather than in an accepted, normal one. Cross (1991) and Williams (2005) are known for their insights on social stigma. These researchers have added that meanings inherent to social stigmas are nested within historical contexts, and their meanings can change over time. Overall, social stigma is the term utilized when a person's social, physical or mental condition influences other people's views of them or their behavior towards them. It can be rightly stated that stigma is not limited to the minorities, rather it originates and is practiced by people who think that they have power against others.

The idea of schooling the other person with one's own sense of right and wrong prevails in the society till date. We fail to understand that these belief systems evolve with time. On the contrary, we as a society are still struck with the same old perspective which at present do not serve the purpose of living happily. Our own fixated mind and world-view spread social stigmas in society. The heart-breaking state is that we have normalized social stigma. There exists a stigma to throw the family drama under the carpet to protect the family culture and honor. Further, there is stigma against seeking professional help as well as being labeled the black-sheep of the family.

Kounteya Sinha in his news article "Indians are a depressed lot: Report" wrote about the 2011 World Health Organization (WHO) sponsored study. The article mentions that approximately thirty-six percent of Indians suffer a Major Depressive Episode (MDE) during their lifetime while nine percent of Indians have an extended period of depression. The social pressure to be "normal", causes people to shy away from seeking professional help, wherever required. In Indian context, the pressure to follow the old social perceptions as per the family culture is widely prevalent. It intersects the lines of gender, caste, religion, socio-economic class, and region. These societal pressures have time and again coaxed people's decisions. These social stigmas instilled fear of inviting judgement, gossip and drama amongst the vulnerable people. Alas! These oppressions and stigmas terminate the importance of psychological care needed by the emotionally unguarded person(s) in vulnerable situations. The tainted circumstances or the 'taboos' as we may call it, prevents many people in India from accessing mental health care irrespective of their educational background. It is important to mention here that stigma is not limited to mental health conditions. Sadly, the attitude of society towards cognitive issues tend to be more judgmental than the attitude towards seeking help for medical conditions. Social stigmas can also be related to other characteristics including gender, sexuality, race, religion, and culture.

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Social stigmas are so deep rooted in society that it is difficult to escape from falling into its trap. As a society, we conveniently put the blame on our forefathers for sowing the seeds of social stigmas. We consider ourselves as the ones who have to bear the consequences of the social stigmas instilled by our ancestors. We visualize ourselves carrying the burden of being judged every now and then. We fall victim to the blame game but what is needed is introspection.

Let us put the spot light on the current situation in the world at present, where we are dealing and healing from coronavirus disease 2019 (COVID-19). The outbreak of COVID-19 produced a social stigma and discriminatory behavior towards individuals who have suffered from the disease and those who came in contact with the sufferers. The rippling effects of this social stigma is also faced by the social helpers like frontline workers, medical practitioners, police personnel, etc. If newspaper reports are to be believed then many of the people were forced to leave their houses in order to keep rest of the society safe from being infected by the COVID-19. The condition was so distressing that the family members who lost their loved ones in the battle against coronavirus disease COVID-19 were denied permission to perform the last rites. Ignoring the efforts of the social helpers to keep the society safe has resulted in drawing the line between the society and the social helpers. Customary segregation of those who are affected by COVID-19 further strengthens the stigma. People are aware of the social stigma experienced by those who are admitted due to the zip-lipped issues like HIV, AIDS, mental illness, leprosy, or tuberculosis but COVID-19 has stepped up the idea of seclusion for general public. It stigmatized the activities involving social gathering or even commuting on daily basis, which have otherwise been an integral part of our daily lives. The prevention of COVID-19 demands isolation, insulation and segregation. Hence, the pandemic forced us to practice exclusion. Terms such as social distancing, detention, seclusion, quarantine and isolation suddenly become a part of the household vocabulary. However, since a pandemic is much more than a clinical aspect, all these steps have their own social implications as well. Labeling took a heavy toll and became new fear for the people with COVID-19 symptoms. The social stigma associative with the affirmative report hung on the door of the house with any COVID-19 positive member, made people refrain from seeking help when needed. To overcome this, one major step taken by government was to stop putting the caution letter in front of the houses of the COVID-19 sufferers. The Government of India also issued an advisory, asking the citizens to refrain from stigmatizing any community or area and to be more responsible during a critical time like this. But is it only the responsibility of the government and the front liner workers? We - the society, are equally liable for fighting the pandemic and related stigma.

I again probe my readers about the role of each one of us in stigmatizing COVID-19. Shall we say that we are blame-worthy of the prevailing stigmas just like our forefathers? We as a society need to introspect to overcome the social stigmas to breathe in a socially inclusive society. Social stigma might threaten the basic structure based on which a society grows. In times like this, when “physical distancing” and “physical isolation” are much-required steps to keep oneself healthy, society must act together to stand against all things, be it COVID-19 stigma or other prevalent social stigmas, that

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challenge the cohesiveness of our society. Promoting social inclusion and social protection, promotes the mental health and well-being among people is supreme. It lays a firm foundation within the society to manage adversity while sharing the burden and consequences of any psychological or psychiatric problems.

Research demonstrates that active participation in society and trust-worthy people around us, are key determinants of health and well being. The social inclusion can be considered as the vital prognosticators of health and well being of an individual who overcame any trauma in his/her life. Social inclusion gives a feeling of being socially accepted and the efficacy to be able to contribute to society in a meaningful way. This gives us a key to open the door for a judgement-free society, a society where moral policing is not the part of our daily lives. The call for inclusion has not only been the voice of academicians and activists but also the people who belong to the excluded communities notably from among the lesbian, gay, bisexual, transgender and queer (LGBTQ) communities. The Indian government has welcomed inclusion, be it active participation in paralympics or working on to provide a barrier-free environment to the people with disabilities, further expanding it by the landmark judgement of lifting a colonial-era ban on gay sex in the year 2018.

In the present scenario, the time has arrived where we recognize the importance of overcoming social stigmas. It is the time to unravel the underlying human within our coating of caste, creed, religion, culture or any other dividing barrier. Life's important lessons are learnt during the worst times. We have already experienced the worst during pandemic and now it's the time to learn and move forward. We as a society need to learn the art of accepting one and all without passing judgments. We should inculcate the fact that each one has his/her own journey of life. It's time to bring the change in the society starting from us as an individual. Let us welcome the post COVID-19 era with the new outlook towards life where each one is respected for his or her decisions. Join hands to be the member of an inclusive society.

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# Share Prices Fluctuations in Top Two Indian Textile Firms: A Comparative Analysis

**Ms. Ritika Srivastava<sup>1</sup>, Dr. Sunil Joshi<sup>2</sup>**

<sup>1</sup>Research Scholar, Sharda University, 2017006900.ritika@dr.sharda.ac.in

<sup>2</sup> Professor, Sharda University

It is a worthwhile endeavour to advance the scholarly understanding of the concept of fluctuation in share prices for effective management of an organization. Thereafter, we identify factors particularly relevant for firms in the textile industry.

Our analysis reveals that fluctuation in the share prices of a particular company arises due to following factors:

- Financial Performance & Release of Current News on the Company's Working
- Industry Trends
- Government Policies & Schemes
- Economic Factors incl. Economic Policies, Inflation, etc.
- Dividend Declaration
- Investment by FII's in the relevant sector of the economy
- Variables Analysis including EPS, Net Asset Value per share, Price Earning etc.
- Technical Factors including GDP%, CPI%, Interest Spread etc.
- Price Equity Ratio (comparison of market price of the stock with its book value).

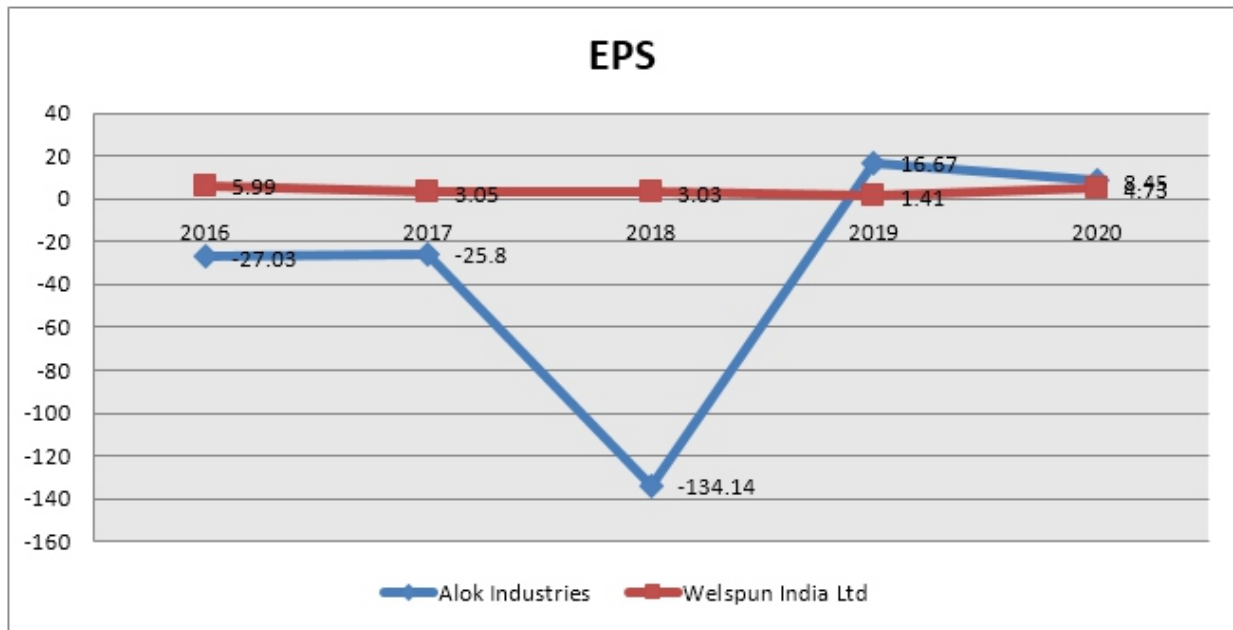
This article tries to explain how fluctuation arises in the share prices of the following two selected textile firms, namely, Alok Industries and Welspun India which are second and third in terms of market capitalization in the industry.

S.No.	Company Name	Market Capitalization(Rs. Cr)
1	Alok Industries	10.476.66
2	Welspun India Ltd.	6937.63

Here we will be analysing the factors which are affecting the share prices of the selected textile firms in the last 5 years.

## COMPARATIVE ANALYSIS: FINANCIAL PERFORMANCE \*

ALOK INDUSTRIES: FINANCIAL PERFORMANCE					
Particulars	2016	2017	2018	2019	2020
EPS	-27.03	-25.8	-134.1	16.67	8.45
WELSPUN INDUSTRIES: FINANCIAL PERFORMANCE					
Particulars	2016	2017	2018	2019	2020
EPS	5.99	3.05	3.03	1.41	4.73



**Figure 1 Comparative Analysis of Earning per Share of Alok Industries and Welspun Industries**

Figure 1 indicates the comparative analysis of EPS between Alok Industries and Welspun Industries. EPS indicates earnings by a company in a particular time frame. The graph is a visual representation of overall inferior performance of Alok Industries as compared with Welspun India Ltd. The figure indicates a huge decline in the EPS of Alok Industries between the year 2017 and 2018 as compared with Welspun India Ltd.

The poor performance of Alok Industries can be attributed to a number of factors. There is a continuous decline in the sales of Alok owing to the write off of debtors, burden of high rate of interest and depreciation and decrease in investment and loans given to wholly owned subsidiaries of the company. Due to the weak manufacturing operation of the company, the organization wrote off debtors in the subsequent years.

Further, Alok Industries planned to increase the investment in the stock market, but to bad market sentiment led to defaults in payments and enlargement in the debtors and receivables cycle due to which problems arose in the payment of new supplies in the company. A combination of these negative factors in resulted in decrease in revenue and profitability of the company.

Between the year 2018 and 2019 the EPS of Alok Industries improved as it progressed phenomenally from a negative number (-134.14) to a positive number 16.67. Efforts to improve relationship with global brands and retailers were instrumental in this turnaround. They provided wide range of products through market segmentation and also due to State-of-the-Art manufacturing facilities and supporting infrastructure. After 2019, selected companies have adopted some government schemes and policies



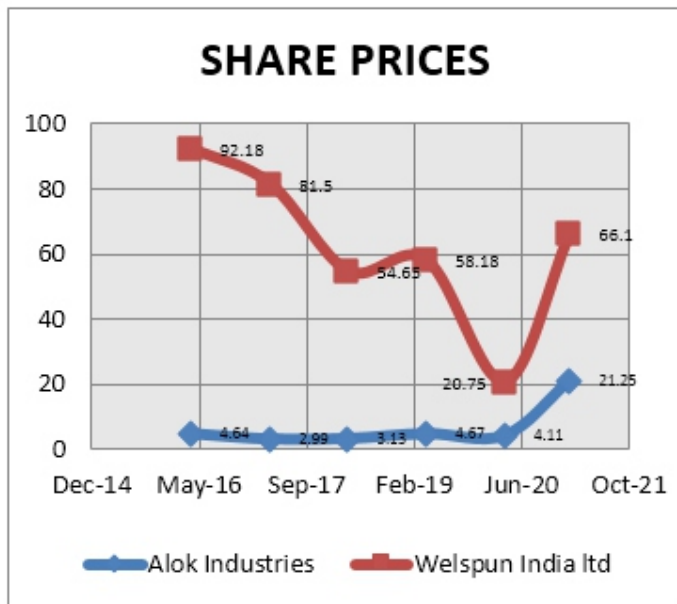
which led to an increase in the EPS of selected companies and growth in the company's financial performance.

Government Schemes which contributed to the revival of bank credit in the economy are as follows:

- a. Made in India;
- b. SCBTS (Scheme for Capacity Building In Textile Sector) a skill development schemes for companies internal growth;
- c. Silk Sangram Scheme, a scheme for the purpose of providing or making improvement in the quality and productivity of the domestic silk which results in decrease in the use of imported silk;
- d. RBI rules for NPA; and
- e. Insolvency and Bankruptcy Code rules

These efforts increased a sense of transparency which in turn will increase investor confidence in the banking sector of the country. The process of recapitalisation of public sector banks and resolution of distressed assets under the IBC is expected to improve the business and investment environment in future.

<b>ALOK INDUSTRIES - CHANGE IN SHARE PRICES</b>		
<b>Date</b>	<b>Open</b>	<b>Close</b>
31-Mar-16	4.66	4.52
01-Apr-16	4.54	4.64
31-Mar-17	3	2.97
03-Apr-17	2.97	2.99
28-Mar-18	2.99	2.99
02-Apr-18	3.13	3.13
28-Mar-19	4.68	4.68
01-Apr-19	4.23	4.67
31-Mar-20	3.92	3.92
01-Apr-20	3.73	4.11
29-Jan-21	21.5	21.25
01-Feb-21	21.65	21.3
<b>Welspun India Ltd. Share Prices</b>		
<b>Date</b>	<b>Open</b>	<b>Close</b>
01-04-2016	101.9	92.18
31-03-2017	88.9	81.97
03-04-2017	87.8	81.5
28-03-2018	59.1	54.69
02-04-2018	59.25	54.65
28-03-2019	60.6	56.75
01-04-2019	60.1	58.18
31-03-2020	22.25	21.8
01-04-2020	21.9	20.75
01-01-2021	68.5	68.4
29-01-2021	68.3	66.1



Figure

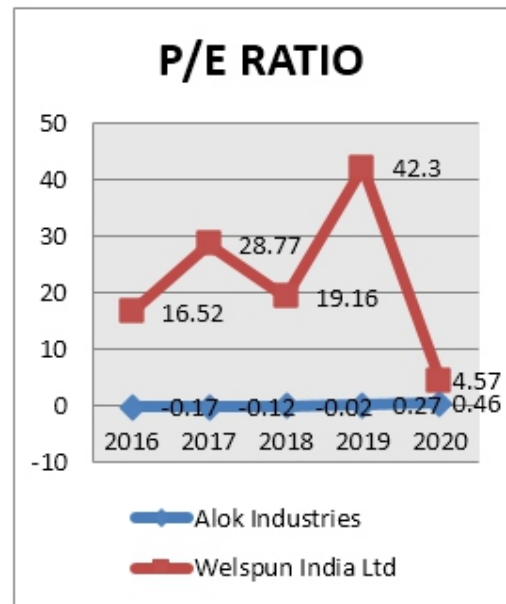


Figure 3

P/E Ratio shows the relationship between the EPS and the share prices of the two companies. In Figure 2 & 3, if we relate share prices and P/E Ratio both are interrelated to each other as there is fall in the share price of Welspun India Ltd. with respect to negative effect in EPS throughout the year, up to financial year 2019-20.

In 2020, COVID-19 brought economic crisis not only in our country but also affected the world and developed countries. Consequently, there was a huge decline in the share prices of companies in almost every sector. This may have contributed to huge decline experienced by Welspun India Ltd. from 2019 to 2020.

In 2019, there were six additional courses added by Ministry of Textiles, Government of India for technical up gradation of the employees working in the textile industries through SAMARTH scheme. As such, this was also adopted by these selected textile companies. This enables the textile companies to have more of trained and skilled workforce which led to increase output and growth in these companies. Ultimately, this will have a positive effect on the share prices of these companies.

#### Other factors which create fluctuation in share prices are as follows:

- Economic Policies like ATUFS scheme (Amended Technology Up-gradation Fund) also helped the textile sector to facilitate adds on to the investment, productivity, quality, employment and exports promotion. It will also indirectly promote investment in textile machinery which is used for manufacturing activities in the textile sector. In this scheme, government helps textile firms in capital generation by providing subsidy on manufacturing investment. Some export promotion schemes like TUFS (Technology Up-gradation Fund Scheme), NCDC which helps textile firms to promote their

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exports which results in development of economy in textile sector and which may help the share prices of selected textile companies improve in value.

- Government also announced a special package of US\$ 31 billion during 2018-20 to boost export and help to improve employment and attract investment.

## **CONCLUSION:**

In conclusion, Alok Industries share prices are not severely affected as they show slight decline as compares with Welspun India Ltd. The fundamental reason behind this is that Alok Industries managed to maintain their performance and reputation in the market and improved their profitability through various schemes introduced by government. A close look at the performance of these two companies during the pandemic (when the economy was adversely affected) reveals that the two companies sailed through with relative ease even during testing times because of government support (through financial package). It is evident that the textile sector needs financial support from the government. Furthermore, pro-growth policies for textiles can strengthen the sector. Positive government intervention and proactive stimulus policies will likely contribute to sustainable growth in the textile sector for the foreseeable future.

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# Will AI be Taking Over the HR in the Near Future?

**Indira Priyadarsani Pradhan<sup>1</sup>, Dr. Parul Saxena<sup>2</sup>**

<sup>1</sup>Research Scholar, School of Business Studies, Sharda University [indirapradhan2004@gmail.com](mailto:indirapradhan2004@gmail.com)

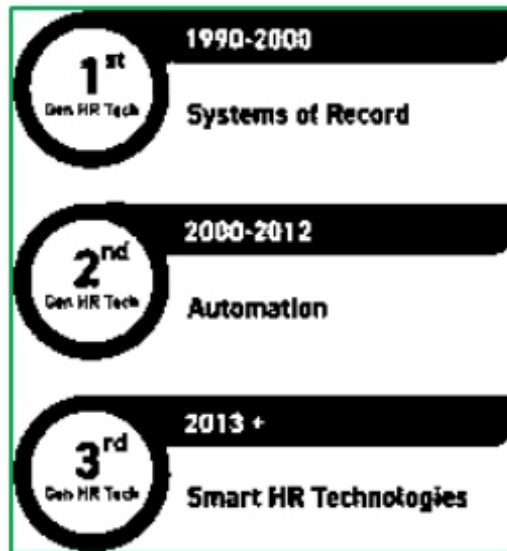
<sup>2</sup>Assistant Professor, School of Business Studies. [parul.saxena@sharda.ac.in](mailto:parul.saxena@sharda.ac.in)

Enterprises are the foundation of a country's economy, and the world has seen three modern upsurges in the past that originated from major innovative leaps in the last two hundred years. Presentation of mechanical machines began Industry 1.0 (18th century) trailed by power fuelled Industry 2.0 (19th century) and then PC and web empowered Industry 3.0 (20th century) (PWC Report, 2017). In the 21st century Industry, 4.0 come into existence.



**Fig1:(<https://www.studymalaysia.com/education/top-stories/the-fourth-industrial-revolution-ir-4.0-and-what-it-means-for-students-like-you>)**

The HR space is not resistant to the change and it also processes through technological disruption. Fourth industrial revolution is characterised by innovative technologies like IoT, big data analytics, AI high-speed data networks like 4G and 5G. Due to globalisation of the economy and the competition between organisations, the insertion of advanced technology has become essential and realistic for all process there is no doubt that Artificial Intelligence has totally changed the HR field and has viably made a more exhaustive and skilled method of satisfying different HR capacities. With the effectiveness of AI in HRM functions, there arises a perception that AI is going to replace the people in various HR functions. But as we know there are two sides of the coin and in the same way, AI comes with positive as well as negative consequences. The cutting-edge innovation, with a fair and smart methodology, can end up being a boon for the associations as opposed to being a curse.



**Fig2:** <http://oat.ai/the-beginners-guide-to-ai-in-hr/>

The organisations should be trained, retrain and change the activities within the organisation to adjust the human and machine parts for utilization of innovation. With appropriate training given to the employees, the association between man and machine can be made highly productive for the organisation. AI has been advancing at a tremendous pace and it's just a matter of time until AI replaces a huge number of blue-collar and even a great many white-collar jobs. When many jobs will be replaced by robots the new jobs are always created. For example, if a surgeon job is replaced by a human then we need people to maintain the robot and individuals to programme the robots for betterment. In such cases, there is a job transition only and jobs don't disappear. There are many new jobs on the horizon that people never imagined earlier. Some popular and growing jobs are in web designing, app development, cloud services and countless more. AI can only replace monotonous and repetitive jobs and AI cannot perform the jobs with more human perfection as needed Jobs that required human touch like a salesperson, entertainer, etc will open up.

With the entrance of AI, there are many new industries that come into existence. We can say that the jobs that were lost due to the emergence of AI, remerged with new skill set by giving rise to new industries. As AI takes over the mundane jobs it's simply fewer things for HR to do, thus giving them ample time and energy to take on bigger tasks like making strategy and plan to achieve organisational goal. Leslie Joseph, a Principal Analyst of Forrester, discovers that it is "unlikely" that AI can abolish the 'human' from the calculation. AI and automation can make HR specialists more viable by giving them control of their time and exertion, and by enhancing their capacities with the knowledge that prompts better dynamic." AI enable HRs to be an important association of the organisation and accomplishing the objectives around worker's experience, culture and individual techniques. Sonali Misra, Head HR, Bain and Company (India), accept that in HR Tech, AI, will enhance and not replace

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human ability. "There has been critical discussion on the upsides and downsides and I trust it is irresponsible to believe that in this computerized age, HR will stay resistant to change.

Computer-based intelligence will gate better on routine assignments and guarantee the HR colleagues focus on appreciated around added substance work," says Misra. Exploration and counselling firms across the globe are anticipating an increase in AI reception as an empowering agent of better HR measures. This is upheld by Anand S, VP - TechVision, Frost and Sullivan, who says that their examination demonstrates the HR Tech reception rate to be around 20-25% in created showcases, and is foreseen twofold over the following five years. An IBM study discovered 66% of CEOs and half of HR personnel recognized the worth that intellectual advancements can bring to HR. The organisation, hence, should be proactive with this innovative move of mainly AI in HR functions as in general computerized environment grows. For example, Anusha Suryanarayan, CHRO of Signify, accepts that with recent college grads joining the workforce, all parts of inner cycles and frameworks have become versatile driven and are being formed by collection of clever information outfitting. Anyway, what do the future HR jobs resemble in the light of arising advances? Anand S of Frost & Sullivan says HR will witness the rise of more strategic and analytical roles. "Several large organisations are now investing in the role of talent scientists - someone who uses data science to identify talent and predict hiring outcomes," he cites as an example.

AI can only automate the mundane works of HR personnel and by using the free time, HR employees can become specialised employees. Consequently, we accept that human and machine working in concordance will prompt the stages and frameworks needed to meet HR objectives!!

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