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Conference Proceedings of **8th REMSONS** INTERNATIONAL RESEARCH CONFERENCE

— On —

Post Pandemic Business Landscape: Recreating Sustainable Competitive Advantage



Organised on 24 September, 2022

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Post Pandemic Business Landscape: Recreating Sustainable Competitive Advantage

Organized on

24 September, 2022

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Editor

Dr. Sumana Chaudhuri

Editorial Committee

Dr. Dhanashree Potey

Ms. Sunita Pujar

Ms. Pooja Goswami

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PH: 22 4520 7711 Extn – 2351 / 2352 / 2340 / 2112

Email : sunita.pujar@dsims.org.in

Excerpts of Presidential Speech Shri Ashok Saraf



President RSET, Chairman DSIMS

President RSET and Chairman DSIMS, Mr. Ashok Saraf, narrated the history of the establishment of the Remsons Research Centre at DSIMS with a generous donation made by Shri Viswaprakashji Harlalka and he also highlighted the vision of Rajasthani Sammelan Education Trust (RSET) towards educational excellence. Mr. Saraf appreciated the theme of the Conference, particularly when the Indian economic environment is showing signs of positivity. He said that there is lot of optimism and signs of recovery in Indian Business environment. The Indian Businesses build resilience through adaptable strategy for any further disruption and reset the entire business model for a sustainable future.

Excerpts of Keynote Speech

Mr Krishna Kejriwal (CMD, Remsons Industries Ltd.)



Chief Guest, Mr. Krishna Kejriwal, Chairman and Managing Director Remsons Industries Limited, delivered his insightful keynote speech on challenges faced by the Indian economy post pandemic. He narrated the recent business challenges in the VUCA world in terms of inflation, recession, war, climate change and financial crisis. To deal with these challenges, he suggested the importance of value engineering, reducing cost, reducing waste, reducing carbon footprint, audit of HR practices and adaptability and retention of human resources. He concluded his speech with the advice of embracing innovation of Product, Process and Institute.

Unveiling of Publications

The Plenary Session also marked the unveiling of the Volume. 4, Issue 1, 2022 of the Institute Journal “The Management Quest” by RSET Leadership Team.

Report of Remsons Centre for Management Research (RCMR)

Dr. Sumana Chaudhuri (Chief Convener)

Presenting the Report of Remsons Centre for Management Research (RCMR) 2021, Dr. Sumana Chaudhuri mentioned that under the aegis of RCMR, the Institute faculty members have published several research articles in the Journals of National and International repute, listed in Scopus and ABS or ABDC indexed. Even a few professors’ research papers have been published in ABDC A category Journals, which helped the Institute to better her NIRF rankings. She also said that the Centre has conducted a five day Faculty Development Program on *Elements of Research Using R and R Studio*. To enhance the research ambience and to imbibe the research culture into the Institutional system, she proposed to conduct the Remsons Research Seminar Series to be conducted monthly, as a new initiative of RCMR.

Excerpts of Keynote Speech

Keynote Speaker Mr. Robin Banerjee, MD Caprihans India Ltd, with a captivated storytelling, highlighted the importance of having right attitude to get success in any activity. As a post pandemic by-product and consequence of war and geopolitical tension, he also elaborated the spiralling inflation worldwide, decreasing value of Indian currency and uncertainty looming across the global economy. He enlightened the management students to follow the *Success Mantra* in the field of business and management, in terms of the acronym- ‘FOURTH’ – six major keys to succeed in life by learning and practising the nitty-gritties of- Finance, Operations, Unique selling Proposition, Risk management, Technology and Human resources.

From Editor's Desk
Dr. Sumana Chaudhuri

Under the aegis of Remsons Centre for Management Research (RCMR), DSIMS and DSGS organized 8th Remsons International Research Conference (RIRC) on 24 September 2022. The Theme of the conference was 'Post Pandemic Business Landscape: Recreating Sustainable Competitive Advantage'.

The conference was inaugurated by Shri Krishna Kejriwalji, Chairman and Managing Director Remsons Industries limited, amidst the august gathering of Shri Ashokji Saraf, President Rajasthani Sammelan and Mr. Robin Banerjee, Managing Director, Caprihans India Limited, Dr. C Babu., Director DSIMS, Dr. Sarita Vichore, Director DSGS, Dr. Sunanda Kar, RSET Educational Director, Mr. M Narendra, Retd Chairman and Managing Director Indian Overseas Bank and other leading industry professionals and academicians.

The 8th Remsons International Research Conference received good responses from academia and industry in terms of research paper contributions. After initial screening, based on merit, around 15 selected research papers by Professors and Deans of various Management Institutes and by industry professionals had been presented in the Conference. The authors and participants deliberated and presented their perspectives on how companies should reimagine their business model and recreate sustainable competitive advantage, as they return to full throttle and get ready to confront again the fresh set of challenges and opportunities of the new normal.

Dr. Kiran Sharma, Area Chairperson Marketing and International Business, KJSIMSR, was the Session Chair. Based on fair evaluation by Session Chair and blind reviewers, three of the fifteen papers were chosen as the Best Paper Awardees.

Dr. Dhanashree Potey summarized the proceedings of the paper presentation. Prof. Pooja Goswami and Ms Sunita Pujar offered the vote of thanks in the plenary session and the Paper Presentation Session.

The Conference was a grand success, attracting delegates and speakers from Mumbai as well as other reputed B –Schools across India. It has enabled the academicians, researchers and practicing managers to share their research findings, issues, concerns, doubts and insights for the future vis-à-vis specific domains of knowledge and practice. We hope that conference has not only provided great intellectual and social interactive platform to the participants, but also has given new perspectives from concrete facts. As a Convener, I am deeply privileged to present the Conference Proceedings and hope that this compendium of research papers will be found useful by the researchers, industry practitioners and policy makers.

Paper Presentation Track Schedule

24th SEPTEMBER, 2022

SESSION I

12.00 Hrs to 13.30 Hrs

Session Chair- Dr. Kiran Sharma

Venue: 623

SR.NO	TIME	AUTHOR	TITLE
1	12.00	Michael D'souza & Merlyn D'souza	To construct a model to find 'The dominant' Big-5 personality trait among Generation Z in covid-19 in Greater Mumbai
2	12:15	Ravindra Dey	To Understand the Role of Well-Being and Its Impact on Stress Management and Resilience on Employees in an Organisation in the Post Pandemic Situation
3	12:30	Harpreet Singh	The Combined Impact of COVID-19 and BS VI Regulation on the Two Wheeler Automobile Sales in India
4	12:45	Vinita Fernandes	Does Crypto currency have the potential to replace Fiat money?
5	13:00	Taruna Maheshwari & Vani Kamath	Post pandemic Business landscape: Recreating Sustainable Competitive Advantage in Higher Education
6	13:15	Ravijaa Mehta	Using decoy as a nudge: Effects of decoy and psychological pricing in relation to buying behaviour

SESSION II

14.30 Hrs to 16.30 Hrs

Session Chair- Dr. Kiran Sharma

Venue: 621

SR.NO	TIME	AUTHOR	TITLE
1	14:30	Aijaj Jafri	Ergonomics Applications in Tool Room
2	14:45	Vivekanand Ankush Pawar & Ketki Vivekanand Pawar	Agile Transformation: A Sustainable Competitive Advantage for Businesses in VUCA Conditions
3	15:00	Shubham Surve	Business Opportunities in Electric Segment
4	15:15	Uzair Patel & Dhanashree Potey	Leveraging Digital Marketing for Brand Building in the Recruitment Industry
5	15:30	Niranjan Shinde	Study and Analysis of Waste Generation during the Processing of Materials in Textile Spinning Process
6	15:45	Saie Parab & Chandrashekhar Kaushik	Relevance of Age in Improving Brand Awareness through Social Media Platforms
7	16:00	Mandar R. Rane & Sakshat R. Sawant	Impact of Changed Buying Behaviour on E- Commerce
8	16:15	Ganga S & Dinesh Harsolekar	Framework to study entrepreneurial traits of First generation entrepreneurs and Next generation entrepreneurs

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To Understand the Role of Well-Being and its Impact on Stress Management and Resilience on Employees in an Organization in the Post Pandemic Situation

Ravindra Dey

Professor and Head of Organizational Behaviour
Xavier Institute of Management and Research, Mumbai

ABSTRACT

A resilient, psychologically stable, and healthy work environment works well under stress and responds quickly and efficiently to changes in the workplace. Many wellness programs have long disregarded resilience, although decades of study show that high resilience is a powerful determinant of health and performance. Wellbeing and resilience are crucial in both preventing the formation of mental health problems and potentially reducing the severity of those that already exist. Stress is described as an emotional or bodily sensation of stress. Labor and stress are inextricably linked, as too much work leads to an increase in stress levels in individuals. The research was quantitative in nature. The data for this study was collected from 126 participants through an online questionnaire form. The questionnaire consisted of 33 statements. The SPSS Software was used to analyze the data. data reliability, Karl Pearson's co-relation analysis, regression analysis, Independents Sample T-test and one way ANNOVA have been used to reach results and come to conclusions. A positive correlation was found between the stress management and resilience of employees and the employee well-being and its factors physical well-being, psychological well-being and social well-being. This study aimed to understand the impact of employee well-being on the resilience and stress management of the employees working in organizations. The employee well-being parameters were physical, psychological and social. The research tried to throw light on how these parameters in the employees of an organization affect the resilience and stress management in employees.

Keywords: Well-being, stress, resilience, pandemic

1. INTRODUCTION

Stress is seen as one of the major issues of modern civilization, with its high competition and dynamics. Stress can be triggered by major life events as well as minor irritations. Stress is recognised to have an impact on one's mental health. However, if it is not adequately managed, it can have a negative impact on a person's life and cause them to be unable to complete crucial daily chores (Malik et al., 2020). Demographic characteristics including age and gender, as well as personal attributes, can help to reduce stress. An organization's effective work environment is dependent on a resilient, physically and

mentally fit workforce, and employees play a critical role in cultivating these fundamental attributes in the workforce. The ability to tolerate, recuperate, and grow in the face of adversities and shifting demands is defined as resilience. Resilience is the psychological power to bounce back from adversity, uncertainty, tension, misfortune, or any change, as well as increasing responsibility. Important to understand how people remain focused in times of change is a key component of resilience. As a result, resilience allows one to move on from misfortune and remain strong after it. The purpose of this study is to examine the relationship associated with stress management and resilience on employee well-being in an organisation and understand the impact of employees well-being and its various factors such as physical, psychological and social on stress management and resilience of the employees at workplace (Sharma and Jain, 2020).

1.1 Problem Statement:

Employees are required to be resilient manage stress in order to be able to deal with difficult situations in their personal and professional life. But there are various factors that tend to affect resilience and stress in an individual. The study aims to understand the impact of Employees Well-being and its various factors such as physical, psychological and social on coping resilience and stress management in employees at workplace.

1.2 Purpose and scope of the study

The purpose of this study is to examine the relationship associated with stress management and resilience on employee well-being in an organization and to understand the impact of employees' well-being.

- To find the impact of **employee well-being on resilience of the employees at the workplace.**
- To find the impact of **employee well-being on stress management of the employees at the workplace.**

1.3 Research Question

- Is there a relationship between the employee well-being and stress management of the employees?
- Is there a relationship between the employee well-being and the resilience within employees?

2. LITERATURE REVIEW

2.1 Resilience

The term 'resilience' has its roots in physics and mathematics, with the mechanism of a metal bending under stress and then 'bouncing back' without breaking being a common illustration of resilience. In the behavioural sciences, the term "resilience" has been used to identify factors that contribute to human survival over a long time. There has yet to be agreement on the ideal way to operationalize resilience, with each definition determined by the long - term socio background, as well as the sample population for which the study was done.

In a complex, dynamic, and linked environment, organisational resilience is defined as "a result of an organization's general situation awareness, control of keystone weaknesses, and adaptive capacity." By virtue of communities' reliance on organisational services, organisational resilience is critical not just to the survival and functioning of the organisation, but also to the existence and operation of the larger society in the face of adversity. More than merely comprehending the importance that employees play in their company's survival, empirical research also suggests that job engagement, which is motivated by employee resilience, is a crucial predictor of organisational resilience. Employees who have high psychological resilience, on the other hand, have a tendency to be quite favourable of corporate change as a result of the good emotions they experience throughout such transformation. As a result, it stands to reason that while evaluating organisational resilience, attention should be paid to the well-being and resilience of the organization's personnel.

2.2 Employee well-being

Employee wellbeing is generally understood to be more than merely the absence of illness among employees. When it related to employee satisfaction, employers used to emphasis on health benefits. The goal of employee wellbeing is to enhance the wellbeing of all employees. When discussing healthy and well-functioning persons or employees, it is not just about physical well-being, but also about other aspects of well-being that must be considered. To put it another way, the phrase "employee welfare" has evolved beyond its original meaning of providing healthcare to employees. (De Caroli and Sagone, 2016). Employee engagement is aided by company wellness programmes. Employees feel attached, their health improves, and their happiness rises as a result of implementing an employee wellbeing programme. All of these elements contribute to a better degree of employee engagement. Employee engagement, on the other hand, is influenced by job enrichment and effective feedback processes. Employees are more engaged at work when their wellbeing is optimised, and their productivity rises, which has a good impact on their experience.

Employee well-being is more important than ever before, as organisations have understood the power it has to alter their employees' lives, cut absenteeism and healthcare expenses, and foster a healthy corporate culture (Thanki, 2021). The COVID-19 pandemic has undoubtedly placed a greater emphasis on mental health than ever before, resulting in greater understanding and compassion in the future. Employers have begun to place a greater emphasis on advantages such as exercise programmes and standing workstations, rather than specific health conditions. After all, avoiding disease is significantly less expensive than treating it, and it also benefits employees. (Murugesan and Megavannan, 2018).

2.3 Stress management

Stress has received more attention in recent years, since the percentage of employees experiencing it has increased as a result of globalisation. An organization's ruin and obliteration are accelerated by an unsettling work environment. A leader who is overworked is unable to ensure that the organization's efficient and effective goals are met. (Malik et al., 2020). Occupational stress occurs as a result of professional variables affecting employees' ability to modify their psychological, bodily, and social conditions, which causes the individual's mind or body to deviate from its basic functioning. Occupational stress is a set of emotional, behavioural, and physiological responses to ominous and adverse features of one's workplace, coworkers, and working conditions. (Sharma and Jain, 2020). The work environment is given special attention because it serves as a source of stress. Workplace stress is an ongoing condition induced by workplace conditions that have a negative impact on workers' employment advancement and overall well-being. It's a never-ending condition brought on by job conditions that can have a significant impact on people' career prospects and overall well-being. Researchers investigating the origins of stress have identified stressors such as anxiety, narcissism, hatred, guilt sentiments, over-sensitivity, desire, miseries, frustration, dread, disappointment, and a want for approval. Change events that lead to intense stress, such as physical injury or illness, the death of a partner in life, divorce, marriages, sexual issues, pregnancy, the addition of a new close relative, problems with supervisors, managers, monetary obligations, and changes in working conditions. Stress management, on the other hand, is essential for living a prosperous and creative life. Employees can reduce stress by participating in work outs, exercises, yoga, Zumba, eating a nutritious diet, sleeping on a regular schedule, and meditating. Managers must ensure that employees manage stress on a timely basis in order to promote employee engagement and establish a healthy and thoughtful culture. However, in order to effectively manage stress, you must first identify the source of the problem. Stress management refers to a variety of techniques that can be used to help a person manage their stress levels. The goal of stress program is to enhance an employee's day-to-day performance and job happiness. Organizations and managers must set realistic and measurable goals for their personnel. Stress management sessions must be made available by organisations. It is advantageous to the workforce and allows them to control their stress. All we have to do now is plan appropriately and work within the company's culture.

3. RESEARCH METHODOLOGY

The study aims to understand the impact of Employees Well-being and its various factors such as physical, psychological and social on resilience and stress management of the employees at workplace.

3.1 Research Design:

This research is based on a quantitative study. A total of 126 respondents filled the questionnaire which was collected via online mode. The questionnaire tried to gauge the resilience level of the respondents and tried to understand the impact of physical, psychological and social well-being on resilience and stress management of the employees at workplace.

3.2 Data Collection:

Primary and secondary data sources were used to obtain the data for this research. The primary source comprises of direct information that was collected through an online questionnaire. The secondary data sources include research papers, articles, books and related publication available online. To collect primary data on a quantitative approach was adopted through a survey questionnaire comprising of 33 statements which was converted into a Google form and circulated online through social media applications and email, responses were recorded digitally. The sample size of the research study was conducted on 126 participants.

The questionnaire was designed in two sections in order to collect the primary data. The first section focuses on the demographics and personal information of the respondents. The second section of the questionnaire consists of all the parameters with a 5-point rating scale. The options provided include strongly disagree, agree, neutral, agree and strongly agree accordingly coded as 1, 2, 3, 4 and 5.

3.3 Instrument:

1. The Brief Resilience Coping Scale

(Sinclair, V. G., & Wallston, K.A., 2004), was used to measure the degree of resilience in individuals. It comprised of 4 items. Responses were scored on a 5-point scale. Higher scores indicated a greater resilience coping in the respondents.

2. Stress Management Scale

Consumer Booklet of Stress Management Scale SMS-KC, was used to measure the degree of stress management in individuals. It comprises of 14 items out of which 7 items were

positive and the other 7 items were negative. A 5-point scale was used to score the responses.

3. General Well Being Scale

Consumer Booklet of General Well Being Scale GWBS-CVDR was used to measure well-being. The questionnaire comprising of 15 items was used to assess the parameters of values driven physical well-being, psychological well-being and social well-being. A 5-point scale was used to score the responses.

3.4 Participants:

The respondents of the study were a sample of 126 employed individuals. The sample comprised of 41 males (32.6%) and 85 females (67.4%). The respondents were categorized into 4 age groups: Gen Z (18- 24 years), Gen Y (25- 40 years), Gen X (41- 56 years) and Baby Boomers (57-66 years). The respondents belonged to junior level management, middle level management and senior level management roles.

4. RESULTS AND DISCUSSION

4.1 Data Analysis:

The Statistical Package for Social Sciences (SPSS) was used to analyse the data obtained. The SPSS software was used to check the descriptive statistics. Correlation Analysis and Regression, Independent Sample T-tests and One Way ANOVA were done for analysing the various independent factors- Physical, Psychological and Social Well-being have on the dependent variable resilience and stress management.

4.1.1 Reliability Analysis:

Reliability test was conducted to check the reliability of the data. Cronbach's Alpha reliability index was used to evaluate internal consistency of each construct. The responses were subjected to consistency analysis using Cronbach's Alpha, and a value of 0.838 was obtained. The reliability for the sample was found to have a high level of consistency as the scale for the sample was greater than 0.7. (Refer Table. 1)

4.1.2 Correlation Analysis:

To understand the Correlation and the nature of relationship between the variables i.e. Well Being and resilience, the Karl Pearson's coefficient of correlation was calculated. A positive correlation was found between the two variables where $r = 0.350$. Thus it is evident from Karl Pearson's coefficient of correlation that there is high degree of positive correlation between Well Being and resilience. To understand the Correlation and the

nature of relationship between the variables i.e. Well Being and Stress Management, the Karl Pearson's coefficient of correlation was calculated. A positive correlation was found between the two variables where $r = 0.502$. Thus it is evident from Karl Pearson's coefficient of correlation that there is high degree of positive correlation between well-being and stress management. It indicates that employee well-being leads to stress management and resilience in an organisation and vice-versa. (Refer Table 2 and 3)

4.2 Hypothesis testing

H01. There is no significant relationship between stress management and employee well being

Data collected from responses shows a positive correlation was found between the two variables which is well-being and stress management where $r = 0.502$. This indicates a Positive association between the two variables. Further regression analysis has helped to predict values of Stress Management (variable y) values of Well Being (variable x). the prediction equation is $Y = a + bx$. Thus our prediction equation would be $Y' = 2.026 + 0.439X$ where Y is the dependent variable and x is the independent variable. On further analysis dependent variable Stress Management and independent variable Employee Well-being showed that Well-being of employees affected the Stress management in employees with an R square of 0.252 (Refer Table 3).

There is a significant impact of Employee Well Being on Stress Management. The dependent Variable Stress Management was regressed on predicting variables Employee Well Being, F-Value = 44.86 and p value less than 0.05 which indicates that Employee Well Being plays a significant role in shaping Stress Management (Beta = 0.439, p value of 0.001 which is lesser than 0.05) (Refer Table 4).

The null hypothesis can thus be rejected, in favour of the alternate hypothesis: There is a significant relationship between stress management and employee well-being.

H02. There is no significant relationship between resilience and employee well being

Data collected from responses shows a positive correlation was found between the two variables well-being and resilience is $r = 0.35$. This indicates a positive association between the two variables. Further regression analysis has helped to predict values of resilience (variable y) values of Well Being (variable x). the prediction equation is $Y = a + bx$. Thus our prediction equation would be $Y' = 2.610 + 0.372X$ where Y is the dependent variable and x is the independent variable. On further analysis dependent variable Stress Management and independent variable employee well-being showed that well-being of employees affected resilience in employees with an R square of 0.123 (Refer Table 3). There is a significant impact of employee well-being on resilience. The dependent Variable resilience was regressed on predicting variables employee well-being, F-Value = 17.36 and p value less than 0.05 which indicates that employee well-being plays a significant role in

shaping resilience (Beta = 0.372, p value of 0.001 which is lesser than 0.05) (Refer Table 5).

The null hypothesis can thus be rejected, in favour of the alternate hypothesis: There is a significant relationship between resilience and employee well being

4.3 Discussion and Interpretation

4.3.1 Employee well-being and Stress Management

A positive correlation was found between well-being and stress management. It's evident from Karl Pearson's coefficient of correlation that there is high degree of positive correlation between Well Being and Stress Management. It indicates that Employee Well Being leads to Stress management in an organisation and vice-versa. The objective of employee wellbeing is to enhance the wellbeing of all employees. When discussing healthy and well-functioning persons or employees, it is not only about physical well-being, but also about other aspects of well-being that must be considered. There is a significant impact of Employee Well Being on Stress Management. Organizations have begun to recognise that failing to address issues relating to poor employee well-being can result in burnout, stress, or illness. Employees who learn to recognise the indicators of stress and how to deal with the obstacles that lead to poor mental health can keep stress at work under control while also focusing on the wider picture of productivity. Workplace well-being is more than just managing a physical and socio - cultural environment with the goal of keeping employees safe. It necessitates businesses actively assisting people in improving their physical and emotional health. Thus we say that Employee Well Being plays a significant role in shaping Stress Management.

4.3.2 Employee well-being and Resilience

A positive correlation was found between well-being and resilience. It's evident from Karl Pearson's coefficient of correlation that there is high degree of positive correlation between Well Being and Resilience. It indicates that Employee Well Being leads to Resilience in an organisation and vice-versa. The focus of employee wellbeing is to ensure the health of all personnel. When discussing healthy and well-functioning persons or employees, it is not only about physiological well-being, but also about other aspects of well-being that must be considered. There is a significant impact of Employee Well Being on Resilience. Wellbeing and resilience are important in preventing the onset of mental health problems as well as potentially lessening the severity of existing mental health problems. Wellbeing and resilience are vital to developing efficient problem-solving skills, building and maintaining interpersonal relationships and realistic goal setting, all of which greatly enhance an individual's ability to perform and contribute meaningfully in daily life. Focusing on wellbeing and building resiliency is important in establishing a holistic approach to health, addressing both physical and psychological states. Resilience, which is

directly related to wellbeing, is about having the ability to cope with and adapt to new situations. Wellbeing as a state at a point in time for an individual, whereas resilience is less than a point and more of a continuum. Resilience appears to improve workers' overall wellbeing, nurture their ability to self-regulate and improve numerous outcomes for both the business and the individual. Resilience significantly increases workers' overall well-being, enhance their ability to self-regulate, and improve a variety of company and individual outcomes. Thus we can it can be said that Employee Well Being plays a significant role in shaping resilience.

5. LIMITATIONS OF THE STUDY

This research paper gives various insights about employee well-being and explores only a few factors on well-being that impact resilience and stress management. This study focuses on factors of employee well-being such as physical, psychological and social well-being of employees while missing out on other factors of employee well-being which could have an impact of resilience and stress management in employees in organizations. The research study was conducted on sample size of is 126 because of which the statistical tests would have not been able to identify the significant relationships between the parameters which further reduces the scope of the study. A bigger sample size sets out an opportunity for a more accurate data. This research tries to analyse the various employee well-being factors that impacts resilience and stress management of the employees, but at times certain situations can create a biasness when it comes to coping resilience and stress management. Possibility of participants being biased or dishonest while responding to the survey can influence the data collection and impact the overall final results. Another limitation worth mentioning here was that due to the paucity of resources and time, it has not been possible to explore the possibilities of changes in the perceptions of the sample respondents over time.

6. FUTURE SCOPE OF THE STUDY

This study on the impact of employee well-being on resilience and stress management of the employees working in organizations was conducted through a quantitative survey questionnaire which was answered by 126 respondents. This study could be further extended with a larger sample size covering a different demographic segment which would lead to more inferences. This study focused on only three values i.e., physical, psychological and social well-being of employees, while missing out on other factors of employee well-being such as career well-being, financial well-being that could be touched upon. Hence, this study could be explored for future researches with new factors that affect resilience in employees. The study could further dive in to explore nature of relationship of various other demographic factors such as level of experience and education background and their effect on resilience and stress management among employees in organisation.

7. RECOMMENDATIONS & CONCLUSION

Resilience is the fastest-growing wellness priority in the business world; it more correctly predicts success and improves employee well-being and performance. Resilience, or the ability to thrive from losses or persevere in the face of adversity, could be the key to long-term success. Workplace stress is a global issue that has piqued the interest of researchers, academics, authorities, and decision-makers. Poor performance, low staff morale, a lack of control, job insecurity, and, to a greater extent, employee well-being has already been linked to it. Employees at higher organisational levels reported experiencing more stress while making key decisions and responding to crisis circumstances than workers at lower levels, who reported inadequate pay and lack of growth opportunities due to stress. Resilience and stress management can have a substantial impact on a person's psychological well-being. Employees with more resilience have been shown to have reduced stress, depression, and mental health issues. It is more crucial than ever for businesses to understand how to be more resilient and to develop a robust work environment for their employees, as well as to change the work environment or corporate culture to create a more resilient workspace. Good personal and professional social interactions are definitely a winning strategy in life, since they are linked to improved psychological and physical well-being. As a result of these characteristics, it appears that social well-being has a major impact on resilience and stress management.

Employees, employers, and authorities must all work together to ensure that stress does not negatively impact employee well-being in the short and long term. Flexible work schedules, fostering employee involvement in work-related decisions, organizational and supervisory assistance broadened, training and therapy sessions to help with stress management, and other methods have been advocated and implemented to a large extent. It is the organization's job to ensure employee wellbeing in order to achieve proper productivity, performance, and work- life balance. The outcome of this study clearly indicated that there was a significant relationship between employee well-being and their impact on resilience and stress management in the employees in organisation. It was also apparent from the study that a high degree of correlation existed between these research variables. As remote working blurs the line between work and life, organisations are prioritizing employee well-being and mental health. This focus on nurturing employee well-being is critical to developing workplace resilience and stress management.

8. ANNEXURES

Table 1- Cronbach Alpha

<i>Cronbach's Alpha</i>	<i>N of Items</i>
.856	33

Scale Statistics

<i>Mean</i>	<i>Variance</i>	<i>Std. Deviation</i>	<i>N of Items</i>
104.14	218.203	14.772	33

Table 2- Correlation Analysis

		Phys Code	Psy Code	Soc Code	Well Being Code	SM Code
Phys Code	Pearson Correlation	1	.544**	.234**	.764**	.389**
Psy Code	Pearson Correlation	.544**	1	.316**	.845**	.410**
Soc Code	Pearson Correlation	.234**	.316**	1	.665**	.346**
Well Being Code	Pearson Correlation	.764**	.845**	.665**	1	.502**
SM Code	Pearson Correlation	.389**	.410**	.346**	.502**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Table 3- Correlation Analysis

Correlations

		Phys Code	Psy Code	Soc Code	Well Being Code	BRCS Code
Phys Code	Pearson Correlation	1	.544**	.234**	.764**	.211*
Psy Code	Pearson Correlation	.544**	1	.316**	.845**	.302**
Soc Code	Pearson Correlation	.234**	.316**	1	.665**	.281**
Well Being Code	Pearson Correlation	.764**	.845**	.665**	1	.350**
BRCS Code	Pearson Correlation	.211*	.302**	.281**	.350**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Table 4- Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.350 ^a	.123	.116	.60329

a. *Predictors: (Constant), Well Being Code*

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.320	1	6.320	17.366	.000 ^b
	Residual	45.131	124	.364		
	Total	51.451	125			

a. Dependent Variable: BRCS Code

b. Predictors: (Constant), Well Being Code

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.61	0.325		8.024	0
	Well Being Code	0.372	0.089	0.35	4.167	0

a. Dependent Variable: BRCS Code

Table 5- Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	0.252	0.246	0.4584306

a. Predictors: (Constant), Well Being Code

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.797	1	8.797	41.86	.000 ^b
	Residual	26.06	124	0.21		
	Total	34.857	125			

a. Dependent Variable: SM Code

b. Predictors: (Constant), Well Being Code

Coefficient

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.026	0.247		8.197	0
	Well Being Code	0.439	0.068	0.502	6.47	0

a. Dependent Variable: SM Code

9. REFERENCES

- Abha Sharma and Vipin Jain (December 2020). A study of relationship of stress and demographic profile of employees with special reference to their marital status and income. UGC Care Journal, Vol-43.
- American Psychological Association (2007). Stress a Major Health Problem in the US, Warns APA; American Psychological Association: Washington, DC, USA; Volume 1, pp. 92–117. 5.
- Anbumalar, C., Dorathy, A. P., Jaswanti, V. P., Priya, D., & Reniangelin, D. (2017). Gender Differences in Perceived Stress levels and Coping Strategies among students. International Journal of Indian Psychology, Vol. 4, (4).
- Bell A, Rajendera D, and Theiler S (2012). Job Stress, Wellbeing, Work-Life Balance and Work-Life Conflict Among Australian Academics. Electronic Journal of Applied Psychology. 8(1): 25-37
- Christin Gerhardt (2020). How are social stressors at work related to well-being and health? A systematic review and meta-analysis - BMC Public Health. BioMed Central. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-10894-7>
- Holman, D., Johnson, S., & O'Connor, E. (2018). Stress management interventions: Improving subjective psychological well-being in the workplace. In E. Diener, S. Oishi, & L. Tay (Eds.), Handbook of well-being. Salt Lake City, UT: DEF Publishers.
- Jeanne Meister (2020). The Future of Work Is Employee Well-Being. Forbes. <https://www.forbes.com/sites/jeannemeister/2021/08/04/the-future-of-work-is-worker-well-being/?sh=58c745d64aed>
- Malik, M., Saidin, N., Wab, R. A., & Nordin, N. (2020). Investigating the Relationship Between Stress and Psychological Well-Being Among Foundation Students of UiTM. International Journal of Academic Research in Business and Social Sciences, 10(14), 93–101.
- O. Strizhitskaya and M. Petrash (2019). “Perceived stress and psychological well-being: The role of the emotional stability”. The European Proceedings of Social & Behavioural Sciences EpSBS Future Academy ISSN: 2357-1330.
- Stephens, J. P., Heaphy, E. D., Carmeli, A., Spreitzer, G. M., & Dutton, J. E. (2013). Relationship Quality and Virtuousness: Emotional Carrying Capacity as a Source of Individual and Team Resilience. Journal of Behavioural Science, 49(1), 13–41.

- T. K. Murugesan and R. Megavannan (2018). The Effect of Resilience, EI & Well-Being on Employee Performance – An Exploratory Study of BPO & ITES. *Asian Journal of Research in Social Sciences and Humanities* Vol. 8, No. 5, pp. 106-124.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient Individuals Use Positive Emotions to Bounce Back from Negative Emotional Experiences. *Journal of Personality and Social Psychology*, 86(2), 320–333.
- Terracciano A., McCrae R., Hagemann D., & Costa P.T. (2003). Individual difference variables, affective differentiation, and the structures of affect. *Journal of Personality*, 71(5), 669-704. Tugade M.M., & Fredrickson B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional arousal. *Journal of Personality and Social Psychology*, 86, 320-333
- Wellbeing and resilience Student wellbeing (2021)- Reach Out Schools <https://schools.au.reachout.com/articles/wellbeing-and-resilience>

Relevance of Age in Improving Brand Awareness through Social Media Platforms

Saie Parab

Student, MMS-Marketing, Durgadevi Saraf Institute of Management Studies, Mumbai

Chandrashekhar Kaushik

Associate Professor (Marketing), Durgadevi Saraf Institute of Management Studies, Mumbai

ABSTRACT

In this technological world, the concept of creating brand awareness has become extremely crucial for every organization that markets different brands in the market. The traditional marketing process has changed with the introduction of social media marketing. This marketing through the internet is considered a cost-effective technique to increase brand awareness.

According to David Aaker, brand awareness has four major tenets, these are brand recognition, brand recall, top-of-the-mind awareness and brand dominance.

In this paper, an effort is made to determine whether marketing through social media platforms contributes to Brand Awareness through Brand familiarity, Brand recall and Top of the Mind Awareness.

The literature review was done through available secondary data through which a questionnaire structure was formed. Primary data collection was done through the researcher's self-constructed questionnaire. The respondents selected were active users of social media communication channels. Convenience sampling method was used in this survey. A sample size of 164 was studied. Data analysis was done through SPSS Software.

The results show brand recall on social media platform is independent of different age groups, brand familiarity on social media platform is dependent on different age groups and there is no significant difference of the top of mind awareness on brands advertised on social media platform belonging to different age groups.

Keywords: *Social media platforms, Brand awareness, Brand Familiarity, Brand Recall, Top of the mind awareness.*

INTRODUCTION

Branding enables consumers to identify between similar products and services provided by various businesses in today's competitive market, it is an essential element of competitiveness. The ability of a potential consumer to recognise and recall a brand as a part of a certain product category is known as brand awareness. Consumers' perceptions of brand

awareness can range from ambiguity about whether they have ever heard of a product to the certainty that it is the only one of its kind. Creating awareness is expensive and often impossible to support brands with relatively small unit sales and a life measured in years instead of decades.

According to David Aaker in his book “Building Strong Brands” the firms that become skilled at operating outside the normal media channels by using event promotions, sponsorships, publicity, sampling and other attention-getting approaches – will be the most successful in building brand awareness.

Social media is at the core of modern company strategy, and its popularity, cost-cutting initiatives, and rivals' social media activity encourage marketers to engage in social media marketing activities. The impact of social media on consumer behaviour spans a broad range of activities, including educating, sharing ideas and attitudes, gaining awareness and understanding, and visualising post-purchase behaviour without actually purchasing (Tsimonis, 2014). Social media marketing is generally acknowledged to play a considerable role in influencing consumers' perceptions of brands (Keller, 2009). Social media marketing activities are thought to have greater influence than traditional marketing communications (Bruhn, 2012), because consumers use social media channels more frequently to search for products and brands (Mangold, 2009).

Social media marketing is still regarded as a relatively new marketing tool, and the understanding of social media marketing influences on brand awareness and brand image is still limited (Schulze, 2015). A well-known fact is that brand awareness or familiarity, and brand choice is highly correlated (Axelrod, 1968). Therefore, this study analyses the relevance of age in improving brand awareness through social media marketing. This study searches for the answer to the impact of age on brand awareness through social media platforms. The difference between this study compared to previous ones is that it analyses Brand Familiarity, Brand Recall, Top of the Mind Awareness, Brand Awareness and Social Media Marketing dimensions together. Accordingly, it is foreseen that this study shall bring a new perspective to studies of Brand Awareness through Social Media Marketing.

In this paper, an effort is made to determine whether marketing through social media platforms contributes to Brand Awareness through Brand familiarity, Brand recall and Top of the Mind Awareness.

LITERATURE REVIEW

Social media marketing makes use of social media platforms to persuade customers to visit a certain website, company, brand, product, or individuals (Neher, 2013). Winning brand recognition is one of the company's most important marketing goals. This is so that people may purchase a good or service that is associated with a well-known brand. Social media allows the fastest way to gain recognition and effective branding. In comparison to conventional media, social media has an edge since it may build a brand by reaching consumers faster.

Brand awareness is “the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category” (Aaker, *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, 1991). Brand awareness is defined as the power of qualities such as the name, symbol and logo of a brand that is created in the minds of consumers in order for them to define and remember a brand (Keller K. , 1993). Awareness is measured according to the different ways in which consumers remember a brand ranging from (i) Recognition (brand exposure) (ii) Recall (brand recall) (iii) Top of Mind (the first brand recalled) (iv) Dominant (only brand recalled). (Aaker, *Building Strong Brands*, 1996) When a new line of products is released, brand recall refers to how quickly consumers think of the brand. Brand recognition is related to customer brand familiarity (Farjam, 2015). Being the most well-known brand in a product category means that you are the first brand that comes to mind. The degree to which a brand has dominated over a certain product category is referred to as its level of dominance (Aaker, *Building Strong Brands*, 1996).

Brand Recall is the mental reproduction of some target item experienced or learned earlier (Bagozzi, 1983). The extent to which consumers remember advertising and other messages that have been sent about a brand (Prashar, 2012). Brand recall is the customer’s ability to recall a brand when some cues related to the brand are given, requiring that consumers correctly generate the brand from memory (Baumann, 2015).

Brand familiarity reflects the extent of a consumer’s direct and indirect experience with a brand (Alba, 1987). Consumer brand knowledge structures, or the brand associations that are stored in a consumer's memory, are captured by brand familiarity. Although many advertised products are familiar to consumers, many others are unfamiliar, either because they are new to the marketplace or because consumers have not yet been exposed to the brand (Stewart, 1992). The amount of brand information that a consumer can remember about familiar and unfamiliar brands varies. Consumers associate familiar brands with a range of various types of associations. Customers may have used or tried a familiar brand, they may have family or friends who have used the brand and told them about it, they may have seen previous advertisements or promotional materials for the brand, or they may have learned about the brand's positioning, packaging, and other details from the press. Because they haven't had any of these kinds of experiences with unfamiliar brands, consumers don't have many associations with them.

"Top-of-mind awareness" in marketing refers to a brand or specific product coming to clients' minds first when they think of a certain industry or category. At the market level, top-of-mind awareness is more frequently defined as the "most remembered" or "most recalled" brand names. TOMA has also been defined as "the per cent of respondents who, without prompting, name a specific brand or product first when asked to list all the advertisements they recall seeing in a general product category over the past 30 days." (Top-of-mind awareness-Wikipedia, 2022)

In recent years, many businesses have seen social media as one of the most effective ways to communicate and empower consumers to create distinctive brand identities and increase consumer-brand communications (So, 2017). Social media activities are crucial for building, consolidating, and sustaining brand recognition since they go beyond just exchanging

marketing information with customers (Tiago, 2014) . 85% of businesses use social media primarily for brand awareness (Okugbe, 2022). Because of this, businesses are actively involving consumers in their social media marketing campaigns. Therefore, brand awareness will increase the more actively if businesses use and manage social media (Neff, 2014).

Top of Mind Awareness (TOMA) as the focal point of the study is defined as the state of the mind of the customers that allow them to have a particular brand name on the tip of their tongue and can indicate of being aware of that particular brand. In this connection, TOMA is the primary dimension of ‘Brand Awareness’ initially built by traditional advertising and some regular reinforcing activities. (Muhammad, 2013)

Based on the literature that profoundly relied upon Brand Awareness and its tenets, the study helps to understand the relationship between different age groups and Brand Recall, Brand Familiarity and Top of the Mind Awareness through Social Media Marketing.

OBJECTIVE

To study if age is an important factor for Brand Recall, Brand Familiarity and Top of the Mind Awareness of brands advertised on social media platforms.

HYPOTHESIS

H1o: Brand Recall on social media platforms is independent of the different age groups.

H1A: Brand Recall on social media platforms is dependent of the different age groups.

H2o: Brand Familiarity on social media platforms is independent of the different age groups.

H2A: Brand Familiarity on social media platforms is dependent of the different age groups.

H3o: There is no significant difference of top of mind awareness on brands advertised on social media platforms belonging to different age groups.

H3A: There is a significant difference of top of mind awareness on brands advertised on social media platforms belonging to different age groups.

RESEARCH METHODOLOGY

In this study, two different sources of data were used. The first source is the secondary data which is a literature review. The second source is the primary data collected through an online questionnaire called the survey method. The researcher has prepared the questionnaire and done pilot testing before sending the questionnaire to the respondents.

The population of this research consists of users located in Mumbai who are active on the social media communication channels such as Facebook, Twitter, YouTube, Instagram and

LinkedIn. A sample size of 164 respondents is used in this research. Considering the sample using social media platforms, convenience sampling method has been applied in the research.

The questionnaire technique has been applied in obtaining research data. The Google Forms online platform was used to develop and design the standardized questionnaire. Google Forms are web-based questionnaires that can be accessed via the internet on a variety of devices, including computers, tablets, and smartphones. The survey consists of a total of nineteen questions out of which three are demographic questions and sixteen are related to brand awareness through social media. Statistical Package for Social Sciences (SPSS) software was used for data analysis.

LIMITATIONS

The survey was conducted within Mumbai region. The time span of the research was a period of two months (time constraint). This research is also subject to cost constraints.

DATA ANALYSIS

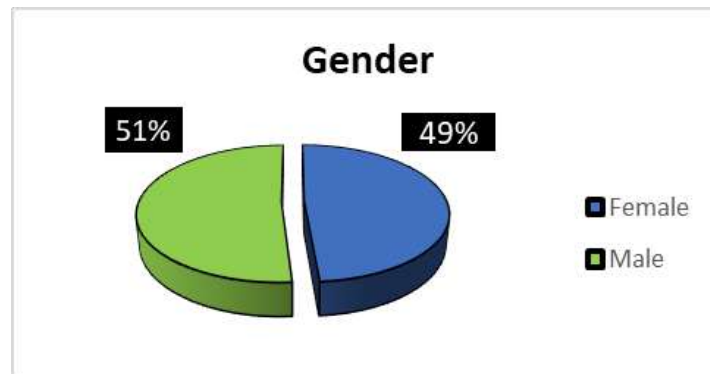
Demographic Characteristics

Table 1: Demographic Characteristics

Demographic Characteristics		Frequency N=164	Percentage (%)
Gender	Male	84	51%
	Female	80	49%
Age	21-30	66	40%
	31-40	40	24%
	41-50	24	15%
	51 & above	34	21%
Occupation	Student	48	29%
	Employed	58	35%
	Business	27	17%
	Unemployed	0	0%
	Other	31	19%

Source: Researchers' Primary Data

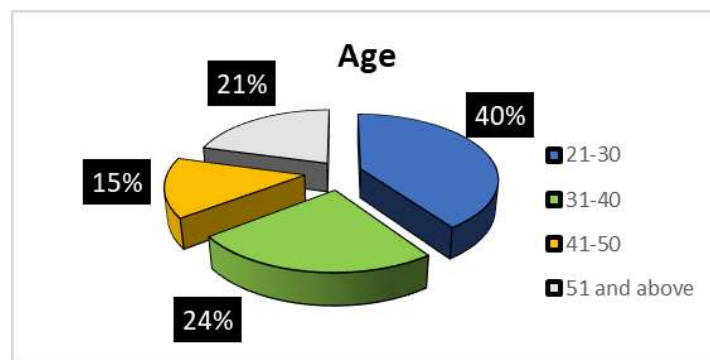
Figure 1: Percentage of Gender of the Respondents



Source: Researchers' Primary Data

Figure 1 shows that 49% of the respondents were female and 51% of them were male.

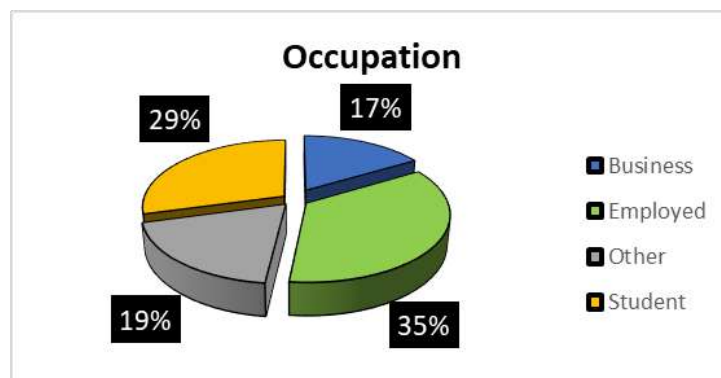
Figure 2: Percentage of Age of the Respondents



Source: Researchers' Primary Data

Figure 2 mentions that 40% of the respondents belong to the age group of 21-30 years, 24% were aged between 31-40 years, 15% of the respondents were from the age group of 41-50 and 21% of them were aged between 51 years and above.

Figure 3: Percentage of Occupation of the Respondents



Source: Researchers' Primary Data

Figure 3 presents the occupational background of the respondents where 35% of the respondents were employed, 29% of them were students, 19% were others who might include housewives or retired individuals and 17% were individuals who had their own business. Hence, the majority of the responses were collected from employed individuals.

Hypothesis 1:

H1o: Brand Recall on social media platforms is independent of the different age groups.

H1A: Brand Recall on social media platforms is dependent of the different age groups.

Table 2: Cross tabulation for Brand Recall & Age

Brand Recall * Age Cross tabulation							
			Age				Total
			21-30	31-40	41-50	51 and above	
Brand Recall	Yes	Count	57	32	22	31	142
		Expected Count	57.1	34.6	20.8	29.4	142.0
		% of Total	34.8%	19.5%	13.4%	18.9%	86.6%
	No	Count	9	8	2	3	22
		Expected Count	8.9	5.4	3.2	4.6	22.0
		% of Total	5.5%	4.9%	1.2%	1.8%	13.4%
Total		Count	66	40	24	34	164
		Expected Count	66.0	40.0	24.0	34.0	164.0
		% of Total	40.2%	24.4%	14.6%	20.7%	100.0%

Source: Researchers' Primary Data

Table 2 shows that 86.6% of respondents having a brand recall of the brands advertised through social media platforms. Of which 34.8% are in the 21–30 age group, 19.5% are in the 31–40 age group, 18.9% are in the 51 and above age group and 13.4% are in the 41–50 age group. Whereas, 13.4% of respondents do not have a brand recall through social media platforms. Of which 5.5% are in the 21–30 age group, 4.9% are in the 31–40 age group, 1.8% are in the 51 and above age group and 1.2% are in the 41–50 age group.

Table 3: Chi-square test for Brand Recall & Age

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.647 ^a	3	0.449
Likelihood Ratio	2.625	3	0.453
Linear-by-Linear Association	0.777	1	0.378
N of Valid Cases	164		
a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 3.22.			

Source: Researchers' Primary Data

It's a universal rule that "if the p-value is less than or equal to 0.05 we reject the null hypothesis and if the p-value is greater than 0.05 we fail to reject the null hypothesis.

According to Table 3, the p-value is 0.449 which is greater than 0.05. This means, we fail to reject the null hypothesis. Therefore, Brand Recall on social media platforms is independent of the different age groups.

Hypothesis 2:

H2o: Brand Familiarity on social media platforms is independent of the different age groups.

H2A: Brand Familiarity on social media platforms is dependent of the different age groups.

Table 4: Cross tabulation for Brand Familiarity & Age

Brand Familiarity * Age Cross tabulation							
			Age				Total
			21-30	31-40	41-50	51 and above	
Brand Familiarity	Yes	Count	65	32	21	33	151
		Expected Count	60.8	36.8	22.1	31.3	151.0
		% of Total	39.6%	19.5%	12.8%	20.1%	92.1%
	No	Count	1	8	3	1	13
		Expected Count	5.2	3.2	1.9	2.7	13.0
		% of Total	0.6%	4.9%	1.8%	0.6%	7.9%
Total		Count	66	40	24	34	164
		Expected Count	66.0	40.0	24.0	34.0	164.0
		% of Total	40.2%	24.4%	14.6%	20.7%	100.0%

Source: Researchers' Primary Data

Table 4 shows that 92.1% of respondents having brand familiarity through social media platforms. Of which 39.6% are in the 21–30 age group, 20.1% are in the 51 and above age group, 19.5% are in the 31–40 age group and 12.8% are in the 41–50 age group. Whereas, 7.91% of respondents do not have brand familiarity through social media platforms. Of which 4.9% are in the 31–40 age group, 1.8% are in the 41–50 age group, 0.6% are in the 21–30 age group, and 0.6% are in the 51 and above age group.

Table 5: Chi-square test for Brand Familiarity & Age

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.552 ^a	3	0.004
Likelihood Ratio	13.345	3	0.004
Linear-by-Linear Association	0.231	1	0.631
N of Valid Cases	164		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.90.			

Source: Researchers' Primary Data

It's a universal rule that "if the p-value is less than or equal to 0.05 we reject the null hypothesis and if the p-value is greater than 0.05 we fail to reject the null hypothesis. According to Table 5, the p-value is 0.004 which is less than 0.05. This means we reject the null hypothesis. Therefore, Brand Familiarity on social media platforms is dependent of the different age groups.

Hypothesis 3

H3o: There is no significant difference of top of mind awareness on brands advertised on social media platforms belonging to different age groups.

H3A: There is a significant difference of top of mind awareness on brands advertised on social media platforms belonging to different age groups.

Table 6: ANOVA - TOMA

ANOVA					
TOMA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.667	3	1.889	1.709	0.167
Within Groups	176.888	160	1.106		
Total	182.555	163			

Source: Researchers' Primary Data

It's a universal rule that "if the p-value is less than or equal to 0.05 we reject the null hypothesis and if the p-value is greater than 0.05 we fail to reject the null hypothesis.

According to Table 6, the p-value is 0.167 which is greater than 0.05. This means we fail to reject the null hypothesis. Therefore, there is no significant difference of top of mind awareness on brands advertised on social media platforms belonging to different age groups.

CONCLUSION

This study shows, brand recall on social media platforms is independent of different age groups, brand familiarity on social media platforms is dependent on different age groups and there is no significant difference of the top of mind awareness on brands advertised on social media platforms belonging to different age groups.

Thus, we can conclude by mentioning, age has no relevance on brand recall on social media platforms, age is relevant for brand familiarity on social media platforms, and age has no relationship, when it comes to top of mind awareness of brands advertised on social media platforms.

SUGGESTIONS

1. The companies should not restrict their social media marketing activities for brand recall to a particular age group but target people of all age groups.
2. The companies should focus their social media marketing activities for the age group of 21-40 years as they demonstrate more brand familiarity as compared to other age groups.
3. Top of the mind awareness has no relation with the age of the social media surfers therefore the company should manage its strategy to enhance their top of the mind awareness among the social media surfers irrespective of their age.

REFERENCES

- Aaker, D. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York: Free Press.
- Aaker, D. (1996). *Building Strong Brands*. New York: The Free Press.
- Alba, J. W. (1987, March 13). Dimensions of Consumer Expertise. *Journal of Consumer Research*, 411-454.
- Axelrod, J. N. (1968). Advertising Measures that Predict Purchase. *Journal of Advertising Research*, 8, 3-17.
- Bagozzi, R. a. (1983). Recall, recognition and recognition measurement of memory for print advertisements. *Marketing Science*, 2(2), 95-134.
- Baumann, C. H. (2015). The role of brand exposure and experience on brand recall—Product durables vis-à-vis FMCG. *Journal of Retailing and Consumer Services*, 23, 21-31.
- Bruhn, M. S. (2012). Are social media replacing traditional media in terms of brand equity creation? *Management Research Review*, 35, 770-790.
- Farjam, S. a. (2015). Reviewing the Concept of Brand Equity and Evaluating Consumer Based Brand Equity (CBBE) Models. *International Journal of Management Science and Business Administration*, 1(8), 14-29.
- Keller, K. (1993). Conceptualizing, Measuring and Managing Customer-Based Brand Equity. *Journal Of Marketing*, 57, 1-22.
- Keller, K. (2009). Building strong brands in a modern marketing communications environment. *Journal of Marketing Communications*, 15, 139-155.
- Mangold, W. a. (2009). Social media: the new hybrid element of the promotion mix. *Business Horizons*, 52, 357-365.
- Muhammad, M. (2013). Top of the mind awareness of a particular barnd as leading consideration of purchasing the product an empirical assessment. *The Journal of Indian Management and Strategy*, 18, 13-20.
- Neff, J. (2014). The world's biggest advertiser P&G shifts focus to sampling.
- Neher, M. B. (2013). *Social Media Marketing: A Strategic Approach*. South Western: Cengage Learning.

- Okugbe, O. (2022, August 16). 31 Practical Ways to Increase Brand Awareness With Social Media. Retrieved from Adoric: <https://adoric.com/blog/brand-awareness-social-media/>
- Prashar, B. D. (2012). Study of brand recall of consumer durables among consumers in Punjab. *International Journal of Research in Commerce, IT and Mgmt.*, 2(7), 84-88.
- Schulze, C. S. (2015). Customizing social media marketing. *MIT Sloan Management Review*, 56, 8-10.
- So, K. K. (2017). Brand Management In The Era Of Social Media: Social Visibility Of Consumption And Customer Brand Identification. *Journal of Travel Research*, 57(6), 1-16.
- Stewart, D. W. (1992, September 21). Speculations on the Future of Advertising Research. *Journal of Advertising*, 1-17.
- Tiago, M. T. (2014). Digital marketing and social media: Why bother? *Business Horizons*, 57(6), 703-708.
- Top-of-mind awareness- Wikipedia. (2022, August 19). Retrieved from Wikipedia: https://en.wikipedia.org/wiki/Top-of-mind_awareness
- Tsimonis, G. a. (2014). Brand strategies in social media. *Marketing Intelligence & Planning*, 32(3), 328-344.

Using Decoy as a Nudge: Effects of Decoy and Psychological Pricing in Relation to Buying Behaviour

Ravijaa Mehta

Narsee Monjee Institute of Management Studies (NMIMS), Mumbai

ABSTRACT

The decoy effect hypothesizes that inserting a "decoy" into a choice set will cause consumers to switch their preference to a higher priced targeted product. This study examines the effect of decoy by manipulating price signs, product sizes and color on age and gender in urban population. The objectives of the paper is to review cognitive bias in presence of decoy and observe the effect of time pressure on asymmetric dominance. The study is an experiment through a survey, using a single blind method. It utilizes a single and multi - variate chi square test for hypotheses. Pearson, Rank coefficient and trend analysis have been used. The study had hypothesized 5 situations, all are statistically significant

Keywords: Decoy effect, consumer behavior, shelf placement, font size and color, cognitive dissonance.

INTRODUCTION

The decoy effect is a consumer behaviour model which hypothesises that inserting a carefully constructed "decoy" into a choice set will cause a segment of consumers to switch their preference to a higher priced targeted product. When contrasted to the other products in the choice set, the decoy is a high-priced, low-value item. This study examines the effect of decoy alongside theories of psychology by manipulating price signs, product sizes and colour on age and gender in the urban population.

SELECTION OF THE PROBLEM

The main reason for a researcher to attend to a problem is its practical usefulness. The problem is important as hundreds of consumers make purchase decisions everyday and marketers are unaware of the cognitions during purchase decisions which could potentially influence the purchase decision favourably. Scarcity and neuroeconomics play an important role during persuasion of consumers towards the target product, which is the main objective of this study. The research took three months to complete, which was convenient. The culture of the area in which a researcher conducts research, as well as the ease of experiment operationalization and feasibility, influence the choice of research problem. The selection is influenced by the researcher's knowledge, skills, interest, motivation and creativity.

LITERATURE REVIEW

The decoy effect is the introduction of a third product in order to enhance consumer interest in higher-priced products, presence of which creates dissonance that the consumer needs to make the buying decision immediately or the offer won't be available in the future. This need for impulse buying is aroused in the presence of a decoy. This need for impulse buying is aroused in the presence of a decoy (Festinger). According to Kahneman we as fast thinkers rely on low cognition and impulses to purchase in the situation of cognitive dissonance leading us to pick non economic product alternatives. A study conducted by Hashem et al. (2020) states that the rate of impulsive decisions made by consumers drastically increases in the presence of a decoy product.

Colours have been shown to have a significant influence on perception. Fairchild, 2013, states that variance in hue, lightness or chroma could have an impact on downstream effects, cognition, or behaviour. Warm colours may produce a quick decision in cases where deliberations are not necessary and impulse purchases are common, Joseph Bellizzi et al.

Activated consumers may be more likely to engage in impulse buying. Red has the maximum wavelength from all the colours in the spectrum while black, as it is not listed as a colour in theoretical physics, has a wavelength of zero. This study measures the difference in activation of consumers through the colour of the price sign. Cowry et. al. suggests the activation component is more appropriate while considering purchasing behaviour. An activated consumer is more likely to buy on the spur of the moment. Colours that are more activating, such as red and blue, are the most suitable for a price sign, as it has the maximum wavelength amidst all the colours on the spectrum. Adding to this, Gorn et. al. it is discovered that colours can be used as an executional cue to influence consumers to purchase more of the target product.

Product size affects quality judgments, as well as a price-based framework for the identified size–quality relationship. Smaller packages are associated with a higher unit price. Since overall price is the only explicitly-provided price cue and consumers are too distracted to assess unit price, large products are rated as higher.(Yan et al).

The predisposition of consumers to select the alternative in the centre of an array, as well as the process underlying one such effect, are investigated, by Atalay et al. (2012).

Lichtenstein et al. (1993) suggests different ways in which consumers perceive price into, positive and negative. This has been extrapolated into the study by operationalizing price and adapting it to serve as low price search, price - quality schema.

Perception of time distorting experiences when faced with a decoy are critical because they occur in situations where small differences in behaviour can mean the difference between correct product choice or irrational purchase.(Hancock et al. (2005).

Gary McKinnon et al. investigated the type of message included on the sign (price - only or product benefit statements). Rizqi Akbar et al., 2020 suggests that increase in information improves the chances of a fair purchase decision being made. The study also states that as more information is available, the decision making process becomes easier and reduces cognitive dissonance. When the amount of information provided by different products varies, consumers may prefer the products which provide the most information. PATTON III. Given this finding, it is entirely possible that consumers will base their product selection decisions on how much information is provided.

Research conducted by Julian, 2019, found that increased font size does not increase the purchase behaviour although it causes synthesising of triggers leading to improved product quality perception, memory and emotional appeal. The consumers believe that only important changes in prices increase the attention given to products with a larger font size.

OBJECTIVES

1. To review the cognitive bias in presence of decoy
2. To observe the effect of time pressure on asymmetric dominance
3. To analyse the effect of placement of prices and products
4. To account for gender, age and level of education on consumer's response in the presence of a decoy
5. To verify the effect of changes in colour, font size and other marketing strategies

HYPOTHESES

1. Effect of decoy and lack of information on perception of price- quality relationship

The researcher proposes that the lack of information and presence of a decoy distorts the price - quality perception of the participants. The participant perceives a positive correlation between price and quality before the participant is exposed to an additional decoy in stage 2 and additional information in stage 3.

H1a: Those exposed to additional information versus only - price information, used as an executional cue, will not choose the target product and choose 'small'.

H0a: There will be no effect of information, used as an executional cue, in a choice- set, on purchase behaviour.

2. Effect of decoy in reinforcing impulse purchase behaviour

The decoy effect is deceptive in nature, the alternative seems value for money and 'too good to be true'. Due to this consumers believe that the need to make the decision at the earliest as the offer is limited and scarce. This false sense of urgency leads to consumers not evaluating all the alternatives thoroughly.

H1b: Those exposed to a decoy containing price only information, used as an executional cue, will be more impulsive in decision making, will feel a false sense of urgency and the post purchase satisfaction will be higher.

H0b; Those exposed to a decoy containing price - only information, used as an executional cue, will show no effects of impulsive purchases, false sense of urgency and not demonstrate any post purchase satisfaction.

3. Effect of decoy in increasing purchase of target product

The study aims to use the decoy effect as a nudge to influence the purchase of the target product. Participants are exposed to 'small' and 'large' product sizes. Large product is a decoy which is a high cost and low value product and is introduced before 'medium'. The study has shown that after exposure to a decoy product, the target product is purchased more than the alternatives available.

H1c: Those exposed to the target product after the decoy, as an executional cue, will purchase the target product and reject the decoy.

H0c: Those exposed to the target product after the decoy, as an executional cue, will have no effect on purchase behaviour.

4. Effect of price font size and colour on likelihood of purchase behaviour

In this study, two conditions have been created relating to font size and colour; three different conditions within each, changing the font size for each product and changing the colour of the price sign for each product; giving 6 experimental conditions.

H1d (i): Those exposed to the products with a larger font size versus regular font size, as an executional cue, will purchase the product with the larger font size and reject the others.

H0d (i): Those exposed to the product with a larger font size versus regular font size, as an executional cue, will have no effect on purchase behaviour.

AND

H1d (ii): Those exposed to the products with red coloured price signage versus black coloured price signage, as an executional cue, will purchase the product with the red coloured price signage and reject the others.

H0d (ii): Those exposed to the product with red coloured price signage versus black coloured price signage, as an executional cue, will have no effect on purchase behaviour.

5. Effects of product size on likelihood of purchase behaviour

As the size of a product increases, the likelihood of it being sold also increases as perception of a positive price - quantity relationship enables consumers to purchase the product they consider 'value for money'. The researcher manipulated conditions to examine the effects of product size in the presence of price only information. Small and large products of the same

size are compared to small, medium and large. This gives the researcher 4 experimental conditions to develop a causal link between size and purchasing behaviour.

H1e: Those exposed to the products which are larger in size (medium and large) versus regular size, as an executional cue, will purchase the products which are larger in size (medium and large) and reject the others.

H0e: Those exposed to the product which are larger versus regular size, as an executional cue, will have no effect on purchase behaviour.

RESEARCH METHODOLOGY

Type of study

The study is an experiment through a survey which uses a single - blind method to investigate relationship between variables through using a logistic model and correlations after a systematic review and a Meta - Analysis.

Study Design

a) Survey:

The study was conducted through a questionnaire with 33 questions. Subjects were selected randomly via circulating the form on social media and provided a total of 207 people who purchase regularly to fill the form for the survey.

b) Participants

1. All participants are people who purchase regularly
2. All participants are above the age of sixteen
3. All participants have completed tenth standard or equivalent
4. Consent will be required for participation
5. All participants are debriefed after the study

c) Sampling design

For probability methods, the researcher has used cluster/ multistage sampling, where all participants had at least cleared their tenth standard or equivalent of education. The sample were all regular purchasers who lived in urban areas most of whom considered themselves to be rational buyers and believed income and price are restricting factors in their purchase decisions. For non - probability, snowball sampling has been used.

d) Limitations

The study was conducted on 207 people and the profile of the sample was restricted to participants who were above the age of 16, lived in urban areas and completed tenth standard or equivalent. Inquiry was based on closed - ended questions which lead to exclusion of subjective opinions and personal differences in buying preferences. Extraneous variables such

as income, lifestyle and tastes and preferences have not been considered. Disposable income is hypothetical and may not be true in case of a real world scenario.

PRIMARY DATA COLLECTION

The independent variables in this study are placement of product, colour and font size of the price sign, size of the product and presence of decoy option as individual factors. The dependent variables under study are purchase of target product in presence of a decoy through rejection of the decoy, attraction effect causing an increase in likelihood of purchase through colour and size of price sign, impulsive buying behaviour and buyer's remorse in presence of a decoy; again, as individual factors.

The study has been bifurcated into 3 stages for ease of research. The first stage consists of demographic questions and questions regarding their purchasing habits before exposing them to decoys.

The second stage is where the participants were exposed to the decoy, consisting of a hypothetical situation where a restriction of disposable income is provided and a series of pictorial representations of two products depicted on white and black backgrounds respectively. Both products were operationalised to measure the purchase behaviour through modification of placement, size, presence of decoy, font colour and font size. The consumers were required to answer which product they were most likely to purchase.

The last stage was a debriefing stage wherein the earlier purchase decisions were reviewed by the consumer. The review consisted of questions interrogating the consumer regarding impulsiveness, time pressure, their perception of product quality relationships and rational decisions. The same pictures produced in stage two were shown with additional information regarding the quantity of the products in numerical value. Participants were asked to assess which product they would purchase and which one seems more economical. Questions were pertaining to measuring buyer's remorse, distorted perception of product quality and price relationship and the need for additional information to make purchase decisions.

SECONDARY DATA COLLECTION

Price perception and attitudes

Price perception concerns how price information is comprehended by consumers and made meaningful to them. One approach to understanding price perceptions is information processing which has been advocated in Figure 1.

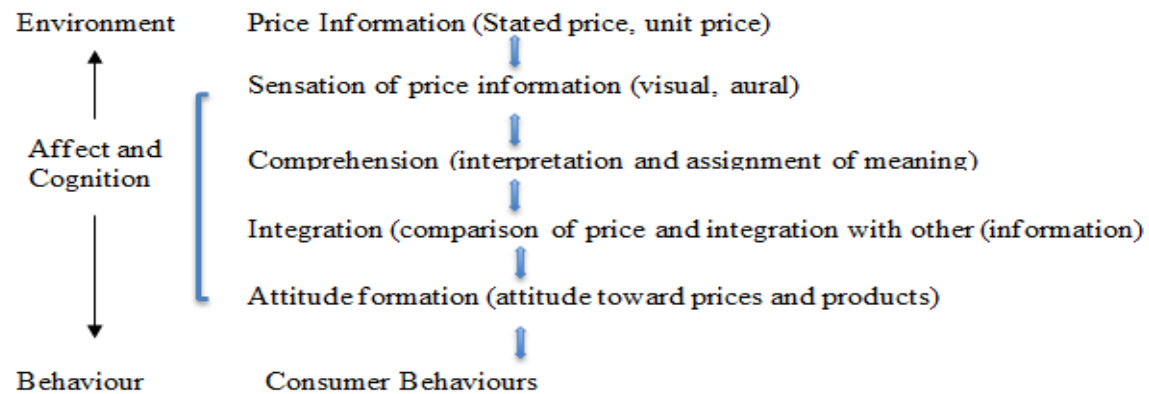


Figure 1: Price effects for a high - involvement product or purchase situation.

This model illustrates an approach to describing price effects for a high - involvement product or purchase situation. Basically, it suggests that price information is received through sense of sight and hearing. The information is then comprehended , which means it is interpreted and made meaningful (consumers understand the meanings of price symbols through previous learning and experience).

Price Behaviour

Depending on the consumer, the product and its availability in various stores and other channels, and other elements of the situation, price can affect a variety of consumer behaviours.

1. Funds Access: One source of embarrassment for most consumers is to arrive at the point in the purchase process where they have to produce funds for an exchange. Consumers exchange much more than money for products, They also exchange their time, cognitive activity, and behaviour effort. Analysis of these elements may provide better insights into the effects of price on consumer behaviour.
2. Transactions: Analysis of the value consumers receive in purchase and consumption may provide better insights into the effects of price on consumer behaviour. Consumers exchange much more than money for products, They also exchange their time, cognitive activity, and behaviour effort. Analysis of these elements, and of what they do with their time and effort, may provide insights into how prices affect their behaviour.

Price Environment

Price is the most tangible element of the marketing mix. From an environmental perspective, this means the price variable typically offers little for the consumer to experience at the sensory level. The price variable may also include an external reference price.

In - store stimuli

In most environments, an endless number of stimuli can influence affect, cognitions and behaviour. A retail store is no exception. Stores have many stimuli that influence consumers: the characteristics of other shoppers and salespeople, lighting, noises, smells, temperature, shelf space and displays, signs, colours and merchandise. Although the effects of some in - store stimuli have been studied extensively, much of this research is proprietary.

TABULATION OF DATA

Age	Gender	Number of Respondents
16 to 20 years	Male	48
16 to 20 years	Female	88
16 to 20 years	Non - Binary	3
21 to 25 years	Male	24
21 to 25 years	Female	21
26 to 30 years	Male	1
26 to 30 years	Female	6
31 years and above	Male	3
31 years and above	Female	13

Table 1: Demography of sample

TECHNIQUES AND TOOLS OF DATA ANALYSIS

The study utilises a single and ,multi - variate chi square test to test the hypotheses. A Pearson test of correlation along with Rank coefficient of correlation has been used to find the existence of relationship between the defined variables. A trend analysis is used to identify differences in gender and purchase behaviour through and between the age ranges.

FINDINGS

The study had hypothesised 5 situations, all of which are statistically significant, proving the statements to be true for the sample population.

People from the ages of 16 to 20 do not regret their impulsive purchases. Regret creeps up for those who are 21 to 25 as their disposable income is self-earned. An overall trend of females regretting their purchases more than males suggests that they make decisions irrationally. Females regret their purchases the most, followed by males and non - binary people. This can be useful while pricing products and considering the target audience of the potential market.

Consumers who have a higher level of education are less impulsive and regret their purchases less as compared to their less educated counterparts..

Impulsive buying behaviour can be triggered through various marketing strategies and could lead to a higher secondary purchase revenue for the store. People who do not consider their income to be limiting, tend to overspend and make impulsive and unnecessary purchases and regret them almost instantly. This can be considered while increasing impulse purchases at the Point of Sale.

There exists a positive price - quality relationship due to which people assume the quality of the product is higher as the price increases. Having a distorted sense of this relationship causes consumers to buy products which are more expensive without having an understanding of the difference in quality. A decoy situation can be created for an organisation to maximise sales revenue in such a case. The organisation can simply add a decoy product and push the sales of the target product. There also exists a positive price - quantity relationship. Similarly, although positive to an extent, does not increase in linearity, Price of the product is always raised at a higher pace than the quantity offered. In conjunction with a decoy, the organisation can maximise their profits by simply adding a decoy product and pushing the sales of the higher priced target product.

There is a negative relationship between perception of impulse buying behaviour and positive price quality and quantity relationships. This is because people make decisions based on product attraction and not rationality of quality and cost benefit analysis. There is a higher percentage of females who believe that there exists a positive price-quality relationship than males.

People who do not consider themselves impulsive buyers, are almost always irrational consumers who regret their purchase. A false sense of time pressure is created due to the decoy which acts as an executional cue for impulsive purchase behaviour. The higher time pressure, the higher will be impulsive behaviour and actual regret. As assumed, the higher the frequency of regret of purchases, the higher would be the regret of most purchases. A decoy can be used to increase frequency of purchases leading to more irrational and baseless purchase decisions and increasing the profit potential of the organisation.

In the situation where the additional information is not given, the purchase of the target product causes the purchase regret to be lower. This is to reduce the cognitive bias created by the decoy and price - only information. Although the purchase regret increases after being exposed to more information.

As the size of the product increases, there is an increase in purchase of the larger product sizes due to the existence of a false perception of price - quantity relations. Products with the larger font sizes are purchased more as attention to the font size and its corresponding product increases. The similar is true for the products with red colour price signage as against the regular black price signage. A higher wavelength of the red colour causes it to be perceived as

better and more attention is diverted to the corresponding product. Colour psychology and a deeper understanding of colour wavelengths can be used to make an efficient marketing strategy.

Product placement on shelves is an important consideration and can be used by the marketer to increase sales of the target product. Central products receive the most attention and are purchased the most because the extremes are eliminated from line-of-sight when placed on a store's shelves.

People prefer to purchase the smallest product quantity as it is the most value for money of all the three options. In price only situations, medium and large products are purchased due to cognitive dissonance cued through existence of a positive price quality and quantity relationship. This suggests that more rational choices reduce purchase regret.

CONCLUSION

Predominantly, the effects of decoy are noted in the research and the pervasiveness of the same ranges from brick and mortar stores to virtual markets and a vast variety of products. Using the decoy in conjunction with marketing psychology and pricing, can lead to drastic increases in organisational sales and profits. With dynamic strategies and adaptive tactics, marketers can proliferate the target market and reach the potential through increase in market share, profit and returns.

REFERENCES

- Whitman, P. A., Cline, A. E., & Feldman, S. R. (2019). The Decoy Effect. *Journal of Dermatological Treatment*, 30(1), 1
- Festinger, L. (2022). *A Theory of Cognitive Dissonance* (Anniversary ed.). Stanford University Press.
- *Thinking, Fast and Slow*. (2011). Farrar, Straus and Giroux.
- Fairchild, M. D. (1995). Testing colour-appearance models: Guidelines for coordinated research. *Colour Research & Application*, 20(4), 262–267.
- Bellizzi, J. A., & Hite, R. E. (1992). Environmental colour, consumer feelings, and purchase likelihood. *Psychology and Marketing*, 9(5), 347–363. <https://doi.org/10.1002/mar.4220090502>
- Crowley, A. E. (1993). The two-dimensional impact of colour on shopping. *Marketing Letters*, 4(1), 59–69.
- Yan, D., Sengupta, J., & Wyer, R. S. (2013). Package size and perceived quality: The intervening role of unit price perceptions. *Journal of Consumer Psychology*, 24(1), 4–17.

- Atalay, A. S., Bodur, H. O., & Rasolofoarison, D. (2012). Shining in the Center: Central Gaze Cascade Effect on Product Choice. *Journal of Consumer Research*, 39(4), 848–866.
- Lichtenstein, D. R., Ridgway, N. M., & Netemeyer, R. G. (1993). Price Perceptions and Consumer Shopping Behaviour: A Field Study. *Journal of Marketing Research*, 30(2), 234–245.
- McKinnon, G. F., Kelly, J. P., & Robison, E. D. (1981). Sales effects of point-of-purchase in-store signing. *Journal of Retailing*, 57(2), 49-63.
- Akbar, R. M. I., Sularso, R. A., & Indraningrat, K. (2020). The Effect of Price, Ease of Transaction, Information Quality, Safety, and Trust on Online Purchase Decision. *e-Journal Ekonomi Bisnis dan Akuntansi*, 7(1), 77-81
- PATTON III, W. E. (1981). Quantity of information and information display type as predictors of consumer choice of product brands. *Journal of Consumer Affairs*, 15(1),92-105
- Hashem, T. N., & Al-Zyoud, M. F. Influence Of Decoy Marketing On Impulsive Purchasing Behavior Among Adult Customers Of Tech Market In Jordan, Mediating Role Of Brand Equity. *Image*, 7(15), 2020.
- Castañeda, J. E. (2019). What Would You Buy? The Effect of Color and Font Size on Purchase Intention in Digital Advertisements.
- Crowley, A. E. (1993). The two-dimensional impact of color on shopping. *Marketing letters*, 4(1), 59-69.
- Gorn, G. J., Chattopadhyay, A., Yi, T., & Dahl, D. W. (1997). Effects of color as an executional cue in advertising: They're in the shade. *Management science*, 43(10), 1387-1400.
- McKinnon, G. F., Kelly, J. P., & Robison, E. D. (1981). Sales effects of point-of-purchase in-store signing. *Journal of Retailing*, 57(2), 49-63.
- Olson, J. C., & Jacoby, J. (1972). Cue utilisation in the quality perception process. *ACR Special Volumes*..(Figure1)

To construct a model to find ‘The dominant’ Big-5 personality trait among Generation Z in covid-19 in Greater Mumbai

Michael D'souza

HR-Manager, Bank of America, Malad (West), Mumbai

Merlyn D'souza

Faculty - HRM, Ph.D., IES's Management College & Research Centre,
Bandra (West), Mumbai

ABSTRACT

The Gen Zers (born 1996–2012) are coming of age. By 2025, the group will make up a quarter of the Asia-Pacific (APAC) region's population—the same as millennials (born 1980–1995). And as Gen Zers mature, they will make and spend more money. Although Gen Zers share many qualities with millennials, it's wrong to think of them simply as a younger version. Generation Z has its own unique characteristics. For one thing, unlike millennials, Gen Zers are entering into adulthood during a global pandemic. Still, the demographics are clear: by 2025, the two cohorts will compose half of APAC consumers.

Many modern and traditional studies in psychology point to 5 basic dimensions of personality. Evidence of this theory has grown over the years with the principal theory emerging in 1949. The five broad personality traits described by the theory are extraversion (also often spelled extroversion), agreeableness, openness, conscientiousness, and openness to experience.

A novel coronavirus (CoV) is a new strain of coronavirus. The disease caused by the novel coronavirus first identified in Wuhan, China, has been named coronavirus disease 2019 (COVID-19) – ‘CO’ stands for corona, ‘VI’ for virus, and ‘D’ for disease.

Formerly, this disease was referred to as ‘2019 novel coronavirus’ or ‘2019-nCoV.’ The COVID-19 virus is a new virus linked to the same family of viruses as severe acute respiratory syndrome (SARS) and some types of common cold.

This is the condition in which this research is being conducted. A peek into the life of a Gen Z in a management role is interesting to study. Based on qualitative research, we are assuming that there exists a dominant personality amongst the Gen Z amidst the Covid pandemic. So we determine the dominant personality trait through quantitative research, by constructing an appropriate model, which has survived the pandemic.

Thus, what is done in the research; “To construct a model to find ‘The dominant’ Big-5 personality trait among Generation Z in covid-19 in Greater Mumbai”, is in the full paper. The work explains dominant personality type depending on parameters, may be computed in order to hire fresh talent at ideal levels for the pandemic era and similar crisis.

Keywords: *Indian service sector, business management, big five personality traits, gen Z, personality determinant model*

INTRODUCTION

Behaviour of people, common things with different people, people's common actions, choices made in common, differences between thinkers are the aspects that, philosophers, theologians and other thinkers have wandered about these eons of years ago. Conversely more than a century ago, psychology, a new science back then, which is a combination of philosophy and physiology have found the answer. Although psychologists differ among themselves as to the meaning of personality, most agree that the word "personality" originated from the Latin word "persona" which referred to a theatrical mask worn by Roman actors in Greek drama that projects a role of false appearance. The Big five Personality traits broadly includes extraversion, agreeableness, emotional stability, conscientiousness, and openness to experience. It neatly answers the very first thoughts in the first part of our introduction. The CoViD pandemic is instrumental in influencing these 5 personality traits. The Gen Z is the one that has witnessed this pandemic in their prime years. It is only fitting to analyse their personality patterns during this era. The most dominant of these 5 traits is the one that displays the best trait in dealing with the crisis inflicted by the pandemic (Kamarulzaman & Nordin, 2012).

A model to determine the dominant of the 5 traits is instrumental in answering the research question for this research to find the best way to deal with a contagion like this. It forms the basis of further psycho-social research to be conducted for future years ahead.

REVIEW OF LITERATURE

In an effort to understand the distinctive ways that Gen Zers research, consider, purchase, and use products, in the second half of 2019 McKinsey surveyed more than 16,000 consumers in six countries—Australia, China, Indonesia, Japan, South Korea, and Thailand.¹ Then they compared results across three generations—Gen Zers, millennials, and Gen Xers (born 1965–1979). The survey asked respondents about their general attitudes toward brands, shopping, digital, and media, as well as their outlook on the world. It also asked specific questions about shopping habits and brands for selected categories. The description of the consumer trends that are shaping the behaviour of Gen Zers, the six broad segments that describe them, and how companies can reach them have been studied. Across APAC, almost a third of Gen Zers spend six hours or longer a day on their phones, a considerably higher share than millennials (22 percent) and Gen Xers (10 percent). Businesses should be aware that while ethical confidants support sustainability in principle, they won't necessarily pay more for it. In South Korea, only 32 percent within the segment say they will (Aimee, McInerney, Yamakawa, & Smith, 2020).

COVID-19 is a new virus, and we are still learning about how it affects children and pregnant women. We know people of any age can be infected and transmit the virus. However, older people and/or those with pre-existing medical conditions seem more likely to develop severe illness. Cold, mild cough, fever, and body pain are the common symptoms of infection (Arnold, 2020). We have also noted that other symptoms such as pain in the abdomen, loose motions, and vomiting are also present in children. Clinical features or symptoms affecting children and adolescents, possibly associated with COVID-19, can include but are not limited to: fever, headache, body pain, tiredness, cough, breathlessness, poor feeding, loss of taste or smell (in a child more than eight years old), rash, red or pink eyes, swollen and/or red lips, tongue, hands, feet, gastrointestinal problems (diarrhoea, vomiting) (Unicef India, 2019).

In such a scenario, a dominant personality type may be able to face the grave pandemic still in force. The Big 5 Personality model is currently is one of the most accepted classifications for personality traits in research by Scholte, Lieshout, Cees & Aken, in 2005. McCrae and Costa in 1983, suggested that personality of a person can be described in 5 factors and most people score near the middle of each trait with only a few people scoring at the extremes. People who score high on extraversion tend to be affectionate, jovial, talkative, joiners, and fun-loving. In contract, low E scorers are likely to be loner, sober and passive. People who score high on neuroticism tend to be emotional, easily embarrassed, pessimistic and vulnerable to stress-related disorders, while those who score low on N are usually comfortable, calm and unemotional as mentioned by Zhang, in 2002. Openness to experience distinguishes people who prefer variety in their lives. They are imaginative, and creative. By contrast, people who score low in openness tend to be conservative; they like routine and are uncreative. The agreeableness scale distinguishes soft-hearted people from ruthless ones. People who score in the direction of agreeableness tend to be generous, lenient, and good-natured, whereas those who go the opposite direction tend to be stingy, irritable and critical of other people. Finally, conscientiousness describes people who are ordered, organized, hardworking and ambitious. In contrast, people who score low on C are usually disorganized, lazy, negligent and aimless as mentioned by Zhang, in 2002. However, limited study was found to validate the construct for each personality type and the researcher has found none done in Greater Mumbai, India. Therefore, the purpose of this research is to validate each construct for each personality type. Specifically, the present study is to sought out whether or not the personality types of respondents were constituted from a valid and reliable construct and its applicability across genders and management specialisations (Kamarulzaman & Nordin, 2012).

RESEARCH METHODOLOGY

The problem statement will define the pertinent business conclusion part. One of the main factors acting as a key competency in managing change in CoViD is managing the enthusiasm and willingness of the young Gen Z (Deloitte, 2022). The way to reach that aim is to ascertain dominant personality of these Gen Z people (2002-2022 Thomas International Ltd, 2021). To predict certainty in reducing the pandemic fears we must aim to construe a

specific personality determinant model. The courage of meeting the challenges of the pandemic through a dominant personality will ensure smooth functioning of the operating competencies to drive human resources change transformation. If personality is a boon to face the pandemic, Gen Z will be served better and well-equipped to face the humdrum of life and seeing deaths all over.

The following research questions will be answered: 1) Does dominant personality trait exist among Gen Z in Greater Mumbai, 2) Could one compare the various factors affecting personality determinants like age and specialization of work? 3) Could one make a personality trait determination formula to compute how personality traits may be enhanced?

The existence of dominant personality type, its comparison among various factors, and the deduction of a model to calculate dominant personality have to be done warily. The need of this study contributes to the 70% success factor in devising a full-proof CoViD management transformation in Gen Z persons. The area under analysis is chosen as Gen Z because of them being the future generation to reach highest levels of competence. The objectives of the study are thus construed as follows: 1) To study the dominant personality types, if present among Gen Z persons. 2) To compare the various factors dependent on dominant personality type 3) To find the main factors as the cause of dominant personality types by devising a model to determine dominant personality types. The following three hypotheses may be devised: H01: There is no dominant personality type among Gen Z persons in Greater Mumbai. H02: Dominant personality types of Gen Z are independent of their work specializations and gender. H03: Dominant personality types used by Gen Z independent of their work specializations and gender may be computed .

The first two hypotheses examine the existence and dependence of dominant personality types among Gen Z persons in Greater Mumbai. The third hypotheses will be examining the relation between dominant personality types and the profile factors of Gen Z and also will construct a model to determine personality. Rejection of the three hypotheses will affirm the dependence of dominant personality type on the various parameters and will later on indicate the need to devise a model to strengthen the dominant personality type. Then a model will be formed based on the evidences gathered till then. The data collection plan involved direct verbal correspondence with the 107 Gen Z participants studied. 107 Gen Z participants were given questionnaires that were filled under personal supervision in the year 2020, 2021 and 2022. The research tool used is SPSS 16.0. The literature review was exhaustively taken from online sources, ProQuest and Ebsco databases, Harvard Business Review articles, online working papers/ theses, and numerous e-articles. The insights from this vast literature helped to fragment down to basic levels of arriving at a business decision. The sample size taken was by snowball method of convenience sampling to ensure randomness. Hence out of numerous Gen Z persons of dominant personality types, 107 Gen Z persons were interviewed. The results were collated and represented in the sections that follow.

DATA INTERPRETATION / ANALYSIS

Hence, from the table below more than half of the total stress levels (71%~77 out of 107 cases) in percentages have one dominant personality type. Hence we interpret that dominant personality types exist among Gen Z in Greater Mumbai. We thus reject Ho1, and analyze that there exists a relation between dominant stress types as in Table 1: Type of specialization

* Dominant personality type Cross-tabulation with Chi-Square tests.

Table 1: Type of specialization* Dominant personality type Cross-tabulation with Chi-Square tests

Crosstab					
			Course		Total
			General management	Pharmaceutical Management	
Domi nant_ 1	Extraversion	Count	5	10	15
		Expected Count	7.4	7.6	15
		% within Dominant_1	33.30%	66.70%	100.00%
		% within Course	9.40%	18.50%	14.00%
		% of Total	4.70%	9.30%	14.00%
	Agreeableness	Count	14	5	19
		Expected Count	9.4	9.6	19
		% within Dominant_1	73.70%	26.30%	100.00%
		% within Course	26.40%	9.30%	17.80%
		% of Total	13.10%	4.70%	17.80%
	Emotional stability	Count	5	6	11
		Expected Count	5.4	5.6	11
		% within Dominant_1	45.50%	54.50%	100.00%
		% within Course	9.40%	11.10%	10.30%
		% of Total	4.70%	5.60%	10.30%
	Conscientiousness	Count	15	21	36
		Expected Count	17.8	18.2	36
		% within Dominant_1	41.70%	58.30%	100.00%
		% within Course	28.30%	38.90%	33.60%
		% of Total	14.00%	19.60%	33.60%
	Openness to experience	Count	14	12	26
		Expected Count	12.9	13.1	26
		% within Dominant_1	53.80%	46.20%	100.00%
		% within Course	26.40%	22.20%	24.30%
		% of Total	13.10%	11.20%	24.30%
Total	Count		53	54	107
	Expected Count		53	54	107
	% within Dominant_1		49.50%	50.50%	100.00%
	% within Course		100.00%	100.00%	100.00%
	% of Total		49.50%	50.50%	100.00%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.166 ^a	4	0.127
Likelihood Ratio	7.378	4	0.117
Linear-by-Linear Association	0.002	1	0.965
N of Valid Cases	107		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.45.			

If R-square value is of 70% or more, then model is stronger for prediction. Here, since it is lesser than 70%, we ignore the model as in Table 2: Model Summary. Also, P value is greater than 0.05, so we accept Ho, that model is not significant.

Table 2: Model Summary

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.282 ^a	0.08	0.062	1.346	0.08	4.491	2	104	0.013
a. Predictors: (Constant), Gender, Course									
b. Dependent Variable: Dominant_1									

Table 3 : Coefficients

Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.942	0.625		3.108	0.002			
	Course	0.11	0.262	0.04	0.419	0.676	0.004	0.041	0.039
	Gender	0.796	0.266	0.284	2.997	0.003	0.279	0.282	0.282
a. Dependent Variable: Dominant_1									

The devised model from above table, that is, Table 3 : Coefficients, may be written as:

$$\text{Dominant Personality Type} = 1.942 + 0.110 \times (\text{Course}) + 0.796 \times (\text{Gender})$$

FINDINGS & CONCLUSION

The findings of the result claim that there exist dominant personality types among Gen Z in Greater Mumbai. A model, which is not as significant or strong enough, is developed to compute the stress level, which is as under.

$$\text{Dominant Personality Type} = 1.942 + 0.110 \times (\text{Course}) + 0.796 \times (\text{Gender})$$

For instance, if course is general management, gender is female, then fitting it into the formula would result as values of 1 = "Extraversion", 2 = "Agreeableness" and 3 = "Emotional stability", 4 = "Conscientiousness" and 5 = "Openness to experience".

The Table 4 : Nomenclature, defining the other nomenclatures is as follows:

Table 4 : Nomenclature

Heading	Nomenclature	
Course	General Management	1
	Pharmaceutical Management	2
Gender	Male	1
	Female	2
Dominant Personality Type_1	Extraversion	1
	Agreeableness	2
	Emotional stability	3
	Conscientiousness	4
	Openness to experience	5
Dominant Personality Type_1	Extraversion	1
	Agreeableness	2
	Emotional stability	3
	Conscientiousness	4
	Openness to experience	5
	None	6

Here it will be as Dominant Personality Type = $1.942 + 0.110 \times (\text{Course}=1) + 0.796 \times (\text{Gender}=2)$

That is, Dominant Personality Type = $1.942 + (0.110 \times 1) + (0.796 \times 2) = 3.644$, which is closer to "4" as "Conscientiousness"

To, make the model stronger and more significant the study may be extended to more Gen Z types, other Gen types and more regions other than Greater Mumbai. A similar model may be developed and it will help to enhance advocates of improving dominant personality types invariably towards effective, business transformation.

REFERENCES

1. 2002-2022 Thomas International Ltd. (2021, March 02). *What Are The Big 5 Personality Traits?* Retrieved from [https://www.thomas.co/:https://www.thomas.co/resources/type/hr-guides/what-are-big-5-personality-traits#:~:text=Originally%20developed%20in%201949%2C%20the,McCrae%20%26%20Costa%20\(1987\)](https://www.thomas.co/:https://www.thomas.co/resources/type/hr-guides/what-are-big-5-personality-traits#:~:text=Originally%20developed%20in%201949%2C%20the,McCrae%20%26%20Costa%20(1987))
2. Aimee, K., McInerney, P., Yamakawa, N., & Smith, T. (2020, June). What makes Asia-Pacific's Generation Z different? *McKinsey & Company Marketing & Sales Practice*, p. 10. Retrieved from <https://www.mckinsey.com/business-functions/growth-marketing-and-sales/our-insights/what-makes-asia-pacifics-generation-z-different>
3. Arnold, D. (2020, Aug). Pandemic India: Coronavirus and the Uses of History. *The Journal of Asian Studies*, 79(3), 569-577. doi:10.1017/S0021911820002272
4. Deloitte. (2022). *The Deloitte Global 2022 Gen Z and Millennial survey*. Deloitte Global: Deloitte Touche Tohmatsu Limited. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/deloitte-2022-genz-millennial-survey.pdf>
5. Kamarulzaman, W., & Nordin, M. (2012). Confirmatory Factor Analysis On The Big 5 Personality Test Inventory. *SEAP 2012, 2nd Southeast Asia Psychology Conference*. Malaysia. Retrieved 7 4, 2022, from <https://files.eric.ed.gov/fulltext/ED535762.pdf>
6. Unicef India. (2019). *Covid-19*. Retrieved from Unicef India: <https://www.unicef.org/india/coronavirus/covid-19>

Impact of Changed Buying Behaviour on E-Commerce

Mandar R. Rane & Sakshat R. Sawant

Students, IES's Management College Research Centre, Mumbai

ABSTRACT

With the emergence of globalization and digitization, people, places, and products have started coming close, approachable as well as affordable (Cetrez & Van Dam, 2018; Foubert & Murphy, 2020). Life was very fast, as everything from toilet roll to airplane ticket was just one click away. All the business plans, meetings, trips came to halt with the introduction of COVID-19 to the globe. The situation of the COVID-19 outbreak, made people think, dynamically and timely diagnosis of how families have adjusted their spending and online shopping, and what are the characteristics of the households who have responded the fastest and strongest. News media reported that customers collapsed supermarket drops to stock-pile for durable goods (Barr, 2020). This was very much unplanned and sudden set back from businessman to the common man. Every sector and individual has been affected badly by this epidemic. Online marketing and shopping trends among customers are also squeezed by this unsure epidemic. If the situation continues for a longer period, it will not be possible for the big giants such as Myntra, Flipkart, Amazon etc. to retain their workforces as they have huge turnover which have come to a complete halt. As per the current status, Coronavirus disease (COVID-19) has infected more than 2.8 million people globally (WHO, 2020).

The advancements and developments in computerised hardware and sophisticated software over the past two decades has influenced the way organisations conduct their business in current highly complex and competitive globalised markets. Kotler and Armstrong (2010) are of the view that starting from traditional shops where consumers had to go physically for making purchases, the companies initially started providing a brick and mortar system in which consumers were allowed choice between going to the store, or making purchases online from official websites of the company. Valvi and West (2012) furthered on what Kotler and Armstrong (2010) stated and discussed the increase in online businesses without any physical presence in shape of shops.

It is not only the change in the way businesses conducts their business operations, the change has also occurred in the way consumers search, analyse, compare, and purchase products and services. While traditionally the consumers used to physically go in stores, look at the products, and decide whether to buy it or not, in current marketplace, online websites allow consumers to view, compare, and purchase products from the comfort of their own home. A general perception is that the way people make their purchase decisions has changed however Tractinsky and Lowengard (2007) stated that there exists a gap in empirical data regarding impact of e-commerce on consumer buying behaviour. This research therefore deems to fill this gap by analysing and evaluating the changes that have occurred in consumer buying behaviours due to e-commerce by taking the supermarket industry of UK as subject area.

Key words: *Consumers Buying Behaviour, E-Commerce, COVID-19*

INTRODUCTION

Many aspects of human life and activities have undergone rapid and radical changes in the past months, and these changes have been accelerated due to the Covid-19 pandemic. These changes may continue to exist and undergo further changes in future. These changes have been led by increased digitalisation and immediate implementation of previously predicted trends over many years. These possible technological advances have been discussed for many years in information management literature. The “new normal” so established has affected the areas of our work, education, healthcare, entertainment and leisure and online commerce. This paper attempts to review the last said aspect, specifically, identify the trends in e-commerce in 2020 (Barnes, 2020). Furthermore, the review will synthesise any learnings for e-commerce system development from a quality perspective. The term 'online commerce' or 'e-commerce' has been defined in many ways, all giving more or less the same sense. Wilkins, Swatman, and Castleman (2000) cited many definitions from different sources (as cited by the authors) as follows and then discussed the merits and demerits of each definition below it. 'For those companies that fully exploit its potential, electronic commerce offers the possibility of breakpoint changes - changes that so radically alter customer expectations that they redefine the market or create entirely new markets.' (EU) 'In the broadest sense, "electronic commerce" can be used to refer to any information exchange which occurs over the superhighway (i.e. by wire or over-the-air transmission or a combination of the two) and encompasses not only commercial transactions, but also all forms of social intercourse that may take place via the medium of the superhighway; that is, "commerce" in its broadest sense. In a strictly commercial setting, it would encompass all the steps involved in negotiating, confirming and performing commercial transactions electronically and include both the contractual relationships formed in those transactions and the regulatory or administrative steps necessary to the conduct of those transactions.' (Australian government) 'Electronic commerce is usefully defined as the conduct of commerce in goods and services, with the assistance of telecommunications and telecommunications based tool. I use two basic models of the electronic commerce process, which I call 'deliberative purchasing' and 'spontaneous purchasing'. (Thompson EC Resources) 'Electronic commerce – or e-commerce – is the automation of commercial transactions using a computer and communications technologies.' E-commerce is concerned explicitly with commerce occurring over networks which use non-proprietary protocols that are established through an open standard-setting the Internet'. 'Electronic Commerce involves the undertaking of regular commercial, government or personal activities using computers and telecommunications networks and includes a wide variety of activities involving the exchange of information, data, or value-based exchanges between two or more parties. Electronic commerce refers to how the internet and the world wide web and Internetconverging technologies like Electronic Data Interchange (EDI) and national intranets like the French Minitel and Singapore One, are being used to process and transmit digitised data. This includes text, sound and visual images to complete business-to-business and business-to-consumer transactions'. However, the author does not propose their own definition. In an OECD workshop, Elmer (1999) presented definitions of various types of e-commerce through charts Thus, there are three main parts of ecommerce. The customer

can be individual consumers (B2C) or business organisations (B2B). Within B2B, it could be raw materials for some processes or final products and services.

LITERATURE REVIEW

Studying consumer buying behaviour is very difficult task as individual carries different perception. No one can predict how an individual can behave in particular situation. But the features and facilities present on E-commerce websites influence the buying behaviour. Consumers prefer the factors like information availability, reputation of website, security and after sales service while purchasing online (Mittal, A. 2013). Marketing mix and reputation (Guo, J., & Jaafar, N. I. 2011), product review (Bailey, A. A., 2005), web experience (Constantinides, E., 2004), very quick services, variety of products and services and fewer prices than traditional market (P.R.Kousalya, T.Mohan, D.Revathi, November 2013) etc. are the factors where e-commerce has been successful to attract the consumers especially youth (Hooda, S., & Aggarwal, S., 2012). These factors are also responsible for influencing the buying behaviour. Researcher also found that Trust and Security are the main factors considered by consumers and also influenced their buying behaviour. (Corbitt, B. J., Thanasankit, T., & Yi, H., 2003), (Chen, Y. H., & Barnes, S., 2007), (Kim, D. J., Ferrin, D. L., & Rao, H. R., 2008), (Hsin Chang, H., & Wen Chen, S., 2008), (Kim, D., & Benbasat, I., 2009), (Ganguly, B., Dash, S. B., & Cyr, D., 2009), (Sahney, S., Ghosh, K., & Shrivastava, A., 2013) Based on above two factors consumers concluded the new factor Risk with which personal information security, payment security, quality assurance, delivery of same product etc. sub factors had raised. Consumers can trust e-commerce companies when the risk factor is replaced by security. Nowadays the advertisements on the television showing e-commerce companies are claiming that they have made their websites very secured and almost zero risk present. And these advertisements have greater impact on consumer buying behaviour (Dinu, G., & Dinu, L., 2012). Consumer buying behaviour can be enhanced with rich quality and creative advertisements and by building positive consumer perception through strong marketing strategies (Malik, M. E., et al., 2013). E-commerce companies have implemented solution of all concern factors to attract customers. Proper designed website and available information content and internet marketing (Miranda E., 2008-09), easy to use, usefulness of website (Nayyar, R., & Gupta, S. L., 2011), online store environment (Hsin Chang, H., & Wen Chen, S., 2008), information drawing and value perspective (Grant, R., Clarke, R. J., & Kyriazis, E., 2007), website reliability/fulfilment, website customer service and website security/privacy (Shergill, G. S., & Chen, Z., 2005), Consumer Impulsiveness and Website Quality (Wells, J. D., Parboteeah, V., & Valacich, J. S., 2011), colour (Pelet, J. É., & Papadopoulou, P., 2012), testimonials (Spillinger, A., & Parush, A., 2012), enhancing the internet experience (Dash, M., Dash, M., & Mahapatra, A., 2013) are main concern factors which are implemented by these companies to attract more customers. These factors have positive and considerable impact on business of websites by assisting consumers in purchase decision making. • E-commerce Benefits and its Success: E-commerce provides many benefits to consumers which are ultimately beneficial for consumers themselves. Following are some benefits which are provided by E-commerce: 1. Consumers worldwide can shop

online 24 hours a day, seven days a week and 365 days a year. 2. Recommends products and related information as per interest and preference of individual consumer. 3. E-commerce is convenient, time saving and pleasant in use. 4. It provides very quick services, variety of products and services and fewer prices than traditional market. 5. It is simple to use, saves cost, delivers in time. 6. Consumers can access very rich information, can access maximum available retail brands and can avail extended offers in online buying.

RESEARCH PROBLEM

In Research Problem Definition research has to consider the root problem of the prescribed research subject. In this research, researchers specifically focus on the E=Commerce and its role in covid 19 pandemic situation. E-commerce provide smooth and simple path to identify and finalize the product for customer. Nowadays e commerce websites are so customized to choose better option around the globe. Current situation is very pathetic and critical due to covid -19. traditional way is not helpful and support business in this pragmatic situation.

OBJECTIVES

The main aim of the research is to evaluate the impact of determinants of online shopping behaviour on the strategic management process of companies primarily focused on e-commerce in their long-term development and competitiveness. The partial aim of the research is to evaluate the quality of determinants of online shopping behaviour, which the monitored companies primarily oriented on e-commerce for their online customers, comparing the quality of these determinants and evaluating the importance of determinants of online shopping behaviour within the questionnaire survey. The research output is the identification of determinants of online shopping behaviour influencing the process of creating and implementing a strategy in e-commerce.

The main purpose of research is to find out the new and unique thing from the universe. Though each study has some specific purpose and objectives, following are the sub-objectives of this research.

1. To identify the role of E-Commerce in Business Enhancement
2. To Study the consumer behaviour in Covid-19 pandemic Situation

RESEARCH METHODOLOGY

Research design is a structured framework for caring research; it constitutes the blueprint for the collection, measurement and analysis of the data. In this research secondary data is consider for research purpose data was collected through internet, journals, newspaper, report, etc.

CHANGES IN E-COMMERCE CUSTOMER BEHAVIOUR: HOW HAS THE FUTURE OF SHOPPING CHANGED?

Over the years, the use of e-commerce has begun to increase and with this has come to a gradual evolution in the customer purchasing behaviour. With e-commerce providing a fast-paced purchasing environment often influenced by wider trends, many consumers have increasingly begun to prefer the use of online shopping over that of traditional high-street stores. Not only has this been influenced by the pandemic, but convenience and fast delivery times continue to play a key role in the gradual growth of online e-commerce.

Alongside these changing customer behaviours comes the even wider variety of products that many people are purchasing. With 69.5% of the total audience purchasing clothing, 51.7% on beauty products and gifts online, the need for guidance and advice to improve the overall e-commerce experience has expanded.

2021 Consumer Insights on the Changing Customer Behaviour:

When looking at customer behaviour several contributing factors have been seen to greatly impact customer purchasing behaviour. With brand loyalty, detailed product descriptions and website user experience all heavily influencing customer purchasing behaviour. As a result, it is down to the business to provide a simple yet effective strategy to improve overall user experience and improve conversions. In addition to this, several other points of interest have a continued effect on the way people interact with your business.

Supporting consumers on their journey is a significant part of this process as this can boost conversions and gradually begin to increase brand loyalty as a result. Though improving user experience and streamlining the checkout process is often enough the use of a fully integrated Intelligent Guided Selling system that provides real-time customer insights in order to monitor and adapt to this changing customer behaviour. But how can an Integrated Guided Selling platform such as this help your business to make the most out of this gradual shift in customer purchasing behaviour?

The Era of Digital Marketing Techniques and tools and Its Influence On Consumer Behaviour:

With the use of e-commerce platforms increasing as a result of the pandemic, customer behaviour and the point of awareness is changing. With many shoppers becoming more cautious in their purchases and the brands that they are purchasing from, consumer insights have suggested that having personalisation can help to drive conversions, particularly for those selling more expensive products. With the online experience expanding rapidly the pace of the online purchasing environment has become much more unpredictable. With many looking for a tailored experience with fast delivery, easy returns and a much more

streamlined experience, it is the interaction with your business that could impact the customer purchasing behaviour.

Not only does your website need to be visually appealing, but it also needs to run correctly and provide your customers with an enjoyable experience. With long loading times affecting bounce rate and other contributing factors such as stock availability all impacting the purchasing behaviour of your audience, it is important to make sure that you are putting your best foot forwards.

Alongside the use of technology to influence customer purchasing behaviour retail research found that 30% of people received tailored offers around the product that led them to purchase the product. A further 38% stated that they led to purchasing a product they had previously looked at due to the product being recommended to them by the brand itself. This personalisation and focus on customer insights are proven to boost engagement and increase conversion over time. Therefore, investing in an integrated guided sales platform may be the driving force needed to ensure maximum ROI.

Online Retail Insights Showcase Social Media, Disposable Income and Its Impact on General Purchasing Behaviour:

Alongside the use of personalisation and email marketing, social media has also positively impacted the customer journey, particularly during the pandemic. With 35% of respondents from our online retail research claiming that social media influences them throughout their customer journey, this is a potential marketing opportunity for both small and larger businesses. With 68% of those between the age of 18-24 stating that they are heavily influenced by social media, this can present a marketing opportunity for businesses to drive traffic and tailor their ads.

With our online retail insights suggesting customer behaviour changing because of social media influence, there is reason to suggest that the likes of Instagram shopping and its customised user experience could become increasingly popular in the years ahead. Alongside the age divide, customer insights suggest that the monthly spend and disposable income of the younger generation could also be a contributing factor when it comes to the confidence around purchasing decisions. To bridge the age gaps surrounding these online purchases, many businesses have begun to integrate a guided selling experience to aid them in making these difficult decisions whilst tailoring it to meet their needs.

The impact of consumer behaviour on the future of commerce

The e-commerce industry was already on an upward growth trajectory with increased digital adoption, but the pandemic accelerated its growth at breakneck speed. The lockdowns and travel bans pushed consumers online and transformed the way we shop. Products that were rarely bought online, such as medicines and milk, are now purchased through the internet

without any hesitation. This growth fuelled competition among online retailers. Wholesalers and retail giants moved online pushing small smaller businesses to rethink their marketing strategy. It changed the way entrepreneurs start, run, and grow businesses, and shaped how consumers choose to shop and pay. This sudden change in consumer and entrepreneurial behaviour has reshaped the future of e-commerce for the years to come. We look at a few trends that will drive this change over the coming years.

Locally-owned and independent businesses: The pandemic also gave birth to small and independently-owned businesses. These businesses offer a more curated shopping experience with unique products and great customer service. They were backed by social media influencers and the consumers quickly caught on with the trend. 83% of consumers look for locally owned businesses to support. Their reasons for shopping at small and local businesses include supporting entrepreneurship, buying unique products, and a good customer experience.

CONCLUSION

Amid rise in e-commerce activities in the country, consumer behaviour has also changed a lot. With increasing internet penetration customer are having a tendency to purchase retail products from online store than traditional brick n mortal store. With growing new markets, consumer choice has improved and is posing a big challenge to ensure consumer welfare. E-commerce is also growing and E-commerce consumers are feeling more protected in transacting online without having prior touch and feel experience of the product. As the e-commerce activity is increasing.

Authenticity is the key: Consumers are no longer interested in just the product. Community and connections are important to them to make informed decisions. As more consumers support local businesses and sustainable products, authenticity becomes important. Consumers want to know the face behind the brand, the brand values, whether the brand is sustainable, and what the brand is doing for the community. Authenticity, transparency, and accountability are as important as the as the quality of the product. 41.8% of consumers want brands to be socially responsible and 50% of consumers are willing to pay extra for environment-friendly services. Consumers also look for brands with a good reputation and environmental responsibility. However, these demands have led to increased shipping costs and increasing pressure on brands' fulfilment capabilities. Rising customer acquisition costs: The increased competition due to the pandemic also accelerated digital ad growth, which is expected to increase by 13%. The pandemic saw a surge in consumers adopting different channels. Naturally, advertisers had to follow the consumers. But experimenting with newer channels such as voice-shopping, connected TV and messaging apps adds to the uncertainty of the digital marketing industry. More importantly, established social media platforms are increasingly becoming competitive with pushing brands to build customer relationships on multiple channels increasing the customer acquisition cost. The pandemic has compelled businesses to be more attuned to their consumers' unique needs and consider their operations

from a different lens. For entrepreneurs, sellers and merchants who have been hesitant to digitize their business, there is no more appropriate time than the present. Investing in Omni channel strategies and pivoting business strategies to offer relevant and timely solutions can help not only compensate for lost in-store revenue but also secure a robust pipeline for the future.

REFERENCES

- Md. Abdul Halim, The Impact of E-commerce on Consumer Purchasing Behavior for the Coronavirus Disease (COVID-19), Journal of Sustainable Business and Economics; Volume 05, Issue 01, January 2022. <https://doi.org/10.30564/jsbe.v5i1.4283>
- Hasan Beyari, Recent E-Commerce Trends And Learnings For E-Commerce System Development From A Quality Perspective, International Journal for Quality Research 15(3) 797–810 ISSN 1800-6450. <https://tinyurl.com/9svybae9>
- Dr.V.Dheenadhayalan, Sandeep.A, Impact of E-Commerce on the Changes in Consumer's Buying Behaviour in Malappuram District, Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 5, 2021, Pages. 3441 – 3452. <http://annalsofrscb.ro/>
- Ms.K.Susmitha, Impact of COVID 19 on E-Commerce, Journal of Interdisciplinary Cycle Research, Volume XII, Issue IX, September/2020, 1161-1165.
- Arjun Mittal, E-commerce: It's Impact on consumer Behaviour, Global Journal of Management and Business Studies. ISSN 2248-9878 Volume 3, Number 2 (2013), pp. 131-138. <http://www.ripublication.com/gjmbs.htm>
- Rahmatyas Aditantri, Febrina Mahliza , Alif Dimas Wibisono, Urban Planning and E-Commerce: Understanding the Impact During Pandemic Covid-19 in Jakarta, International Journal of Business, Economics and Social Development Vol. 2, No. 3, pp. 135-142, 2021. <https://journal.rescollacom.com/index.php/ijbesd/index>
- Vandana Ahujaa, Deepak Khazanchi, Creation of a conceptual model for Adoption of Mobile Apps for shopping from E-Commerce sites-An Indian context, Information Technology and Quantitative Management (ITQM2016), Procedia Computer Science 91 (2016) 609 – 616. <http://www.sciencedirect.com/>

Leveraging Digital Marketing for BrandBuilding in the Recruitment Industry

Uzair Patel

Student, MMS, Durgadevi Saraf Institute of Management Studies

Dhanashree Potey

Asst. Professor, Durgadevi Saraf Institute of Management Studies

ABSTRACT

In the digital age, marketers face new difficulties and opportunities. For marketers, building a brand by carefully considering every component is imperative. Today's marketers have started using digital marketing as a supplement to traditional marketing for brand growth.

Digital Marketing is the utilization of electronic media and the internet to promote products and services. A variety of channels are available for digital marketing which includes social media marketing, Email marketing, Search Engine Marketing, Search Engine Optimization, Affiliate Marketing, SMS marketing, Digital display advertising, etc. It is essential for marketers to identify the most relevant channel or channels and create an optimal mix of them to leverage digital marketing for building their brand.

Employment agencies, recruiting websites, and job search engines make up the recruitment sector. Due to the escalating competitiveness in this market, it is equally crucial for participants to develop their brands as it is for others. The companies in this business must manifest their presence in light of the rising number of open positions and job seekers, which can only be done by creating a powerful brand. Leveraging digital marketing for this purpose is what this focus of this study.

This research paper attempts to apprehend the relationship between Brand building through digital marketing and different digital marketing channels available. For this purpose, primary research was conducted by administering a survey and drawing conclusions from the data collected using appropriate statistical tools.

Regression analysis and ANOVA was performed using the multiple linear regression model, results of which concluded that the channels of digital marketing i.e Social Media Marketing, Email Marketing, Search Engine Marketing, Search Engine Optimization and Affiliate marketing account to 58 per cent variance in brand building through digital marketing, of which, Social Media Marketing and Search Engine Optimization were most significant.

Keywords: *Digital Marketing, Brand Building, Recruitment Industry, Channels of Digital Marketing.*

INTRODUCTION

Digital marketing refers to the use of electronic media by advertisers to market their goods or services. The main objective of digital marketing is to draw clients and give them the ability to interact with the business through digital media. There has been a major shift toward digitalization in India. People are increasingly turning to the internet to find the best option for them rather than using traditional or conventional methods. Digital marketing is cost efficient and significantly improves business outcomes.

Building a brand includes all three aspects of raising awareness, developing, and promoting a business. Increasing brand equity through marketing initiatives is what brand building implies, to put it another way. Branding is an essential component of any organization since it embodies the visual voice of the enterprise. The goal of brand development is to create a unique perception of the company. As part of their plan, marketers have begun to recognize the value and effectiveness of using digital marketing for this reason.

Today's job seekers have high expectations of recruiters. Technology advancements have made the process of hiring employees simpler as well as more challenging. It is important for the job-providing companies to apprehend their presence to get the maximum number of applicants on board which can only be possible if they build their brand which is also crucial to surviving in this competitive era. Numerous prospects for job seekers were made possible by recruiters' usage of social media. It serves as an extra information source for both job seekers and recruiters.

Various other channels are also considered by the brands as well as customers too. Social Media Marketing, Email marketing and SMS marketing has been widely used by recruitment firms. Many of them have understood the importance of other channels too and have started making them a part of their marketing strategies.

This study describes various channels of digital marketing and tries to create a link with Brand building in the recruitment industry. The information in this paper is based on recent literature from published articles, research papers and online sources. Additionally, this report also includes primary research carried out by conducting a survey and drawing conclusion from the survey using statistical techniques.

LITERATURE REVIEW

The study of Yasmin (2015) focuses on how digital marketing draws in customers and enables them to engage with the company online. The study illustrates the connection between conventional and digital marketing. The study also covers the numerous aspects of digital marketing that affect a company's sales. The benefits of digital marketing to consumers are

spelled out precisely in the research. According to the study's findings, digital marketing may reach clients from anywhere and has a beneficial effect on product sales.

Isoraite (2016) study analyzes the opinions of different authors on raising brand awareness. The concept of internet marketing and its implementation The article analyses website, internet advertising, social networks and the search engine optimization.

Indumathi (2018) carried out research in which they state that over the past ten years, the specialty of digital marketing has grown, with direct marketing serving as its foundation. Since there are more people using personal devices, brand marketers have a greater variety of direct and indirect channels for reaching their target audience. The study focuses on how digital marketing affects a certain product's branding. The study presents an overview of several digital marketing methods, including email marketing, SEO, mobile marketing, blogging, affiliate marketing, etc., and their impact on customer brand creation. This study aids in establishing the link between brand building and digital marketing.

Erdenetsetseg et al (2019) in their study clearly demonstrate theoretical model that defines digital marketing, its channels and also different components that build a brand. The study also tries to establish a relation between digital commerce and components of brand building.

Broughton et al (2013), in their study, discuss the expansion of e-recruitment and the use of social networking sites for recruiting. They have made some recommendations, such as that organizations should take into account any potential social media issues, that candidates' information can be verified on social networking sites, that social media sites can be used for a wider recruitment strategy, that job seekers can receive training and information on social networking sites, etc.

Anute (2019) conducted a study to examine the perception of employees about the use of digital marketing tools by organizations for recruitment process. This study describes digital marketing as an effective and cost-efficient alternative to be included in the recruitment process. This study also states E-recruitment attracts suitable job seekers and that's why most of the organizations use internet for the recruitment process.

OBJECTIVES OF THE STUDY

1. To study the various channels available in digital marketing for brand building.
2. To compare the different channels applicable for brand building in Recruitment Industry.
3. To examine the relationship between different digital marketing channels and brand building.

HYPOTHESIS

1. H0- There exists no statistically significant relationship between Brand building through digital marketing and different channels of digital marketing.
2. HA- There exists a statistically significant relationship between Brand building through digital marketing and at least one channel of digital marketing.

RESEARCH METHODOLOGY

The present study deals with the perceptions of the job seekers about their awareness and perceptions about the digital marketing as a tool for Brand building in the recruitment industry. The researcher has selected only five digital marketing tools for the present study; Social Media Marketing, Email Marketing, Search Engine Marketing, Search Engine Optimization, Affiliate Marketing based on the popularity for recruitment process. The perception of job seekers of freshers as well as experienced candidates is considered in this study. The respondents are only from Mumbai city and those who are using digital media for searching the new jobs.

The researcher has selected candidates who are postgraduates, graduates and HSC and those who are seeking for corporate jobs. The researcher has considered corporate jobs at the three management levels. Primary data is collected using the well-structured questionnaire and secondary data was collected from journal papers, books, internet etc.

The data for this study was collected from job seekers across Mumbai city. The sampling technique used in the collection of data was Convenience sampling. The sample size for the study was 87 respondents, questionnaire survey was undertaken. Data was collected through administering the questionnaire to the respondents a survey. The data was analysed using Excel and SPSS software. The respondents were taken from the city of Mumbai.

DATA ANALYSIS

Reliability analysis of research

Table 1 Reliability analysis

Cronbach's Alpha	No. of items
.889	4

To study reliability of the tool, Cronbach's alpha value was examined. From the Table 1 above, it is seen that the score for alpha is 0.889, suggesting the four items have relatively high internal frequency.

The Profile of the Respondents (Demographics)

Table 2: Profile of Respondents

Respondents Profile		Frequency N=87	Percentage (%)
Gender	Male	45	51.7
	Female	42	48.3
Age	18-21	25	28.7
	22-25	22	25.3
	26-29	27	31
	30-33	13	14.9
Educational Qualification	HSC	21	24.1
	Graduate	31	35.6
	Post-Graduate	35	40.2

As shown in Table 2 the profile of the respondents belonged to the various areas in the city of Mumbai. Out of the total 87 sample, 51.7% belonged male and the rest of the sample 48.3 % of them being female. From the sample, it is observed that 31% of the respondents are between the age group of the 26 to 29 years, while 28.7% of the respondents are between the age group of 18 -21 years. The respondents are well educated, 40.2% of the respondents have a postgraduate degree, 35.6% are graduates while 24.2% are HSC.

The Relationship between Brand Building and Digital Marketing

In this paper we try to explain the relationship between brand building through digital marketing and different channels of digital marketing using the multiple linear regression model.

Table 3: Regression Summary

Regression Summary	
R	0.764
R square	0.584
Adjusted R square	0.559
Predictors: Intercept, Social Media Marketing, Email Marketing, Search Engine Marketing, Search Engine Optimization, Affiliate Marketing	

H0: There is no statistically significant relationship between Brand building through digital marketing and different channels of digital marketing.

HA: There is a significant relationship between Brand building through digital marketing and at least one channel of digital marketing.

The Table 3 portrays the regression value between brand building and digital marketing. The result indicates that the R value is significant and H_0 is rejected. Thus, it can be inferred that there is a relationship between digital marketing and brand building. In other word building any brand is depends on digital marketing strategies followed by the firms.

Table 4: ANOVA

ANOVA					
	df	SS	MS	F	Sig
Regression	5	47.287	9.457	22.778	0.000
Residual	81	33.632	0.415		
Total	87	80.920			
Dependent Variable: Brand Building through Digital Marketing Predictors: Intercept, Social Media Marketing, Email Marketing, Search Engine Marketing, Search Engine Optimization, Affiliate Marketing					

The Table 4 of ANOVA shows the significance level while the P value is less than significance level which is 0.05 so it is accepted that Digital activities has significant association with brand awareness. The F value of 22.77 is significant at the level of 0.001, which indicates that the model is appropriate and fits the collected data.

Also, the Regression Statistics are shown in table 3. The R square value of 0.58 indicates that the independent variables account for 58 per cent variance in the dependent variable. Thus, this model is a good fit for the analysis.

Table 5: Regression Analysis

Dependent Variable	Coefficients	Standard Error	T stat	P-value	Correlation Coefficients
Intercept	-0.117	0.384	-0.306	0.761	1
Social Media Marketing	0.273	0.085	3.216	0.001	0.610
Email Marketing	0.130	0.066	1.972	0.520	0.421
Search Engine Marketing	0.101	0.082	1.244	0.217	0.284
Search Engine Optimization	0.530	0.102	5.214	0.000	0.638
Affiliate Marketing	0.068	0.096	0.707	0.481	0.447
Dependent Variable: Brand Building through Digital Marketing					

The coefficient indicates that if the independent variable is increased by 1 per cent, then what will be the impact on the dependent variable. Here, if Social Media Marketing is increased by 1% then it will lead to a 27.3 per cent increase in brand building through Digital Marketing, and so on for the other variables. The correlation coefficient reveals the relationship of the dependent variables with the independent variables. Here, by examining the values of the Correlation Coefficient, we can conclude that Social Media Marketing and Search Engine Optimization have a high level of relationship with Brand Building through Digital Marketing with coefficient values of 0.64 and 0.61 respectively. On the other hand, Search Engine Marketing has the least correlation with brand building through digital marketing, with a coefficient value of 0.28.

CONCLUSION

1. As per this study, it is concluded that there is a significant relationship between brand building through digital marketing and various digital marketing channels, of which, social media marketing and search engine optimization have the most significant relationship with brand building. So recruiters need to focus more on these networking sites.
2. Players in the Recruitment industry should utilize social media and be active on platforms like Instagram, Facebook and LinkedIn. They should also strive to enhance audience engagement by producing captivating content frequently. Recruiters should also give more emphasis on this to attract job seekers attention.
3. The firms / companies social media handles can create a recall for their audiences and they may also utilize it to increase their reach. They can also form various strategies and run social media campaigns to reap the benefits of social media marketing to the fullest.
4. The firms (recruiters) should also focus on maintaining a well-designed website and optimizing it by using appropriate tools, and backlinks and creating quality content such as blogs which they can publish on their website. The more optimized their website will be, the more it will rank higher in the search results of the search engine and the more will reach the target audience.
5. Recruitment firms and platforms should make the most out of digital marketing to apprehend their presence. This may in turn help them to build their brand comprehensively. From the analysis it is observed that digital marketing can be used by the firms (recruiters) to establish relationships with loyal users and affect their personal perception of the product. Thus, digital marketing serves as a digital communication for digital branding.

REFERENCES

- Yasmin, A. T. (2015), Effectiveness of digital marketing in the challenging age: An empirical study.
- Isoraite, M. (2016), Raising brand awarenees through the internet marketing tools. *Independent Journal of Management & Production*, 7(2), 320.
- Indumathi, R. (2018), Influence of digital marketing on brand building. *International Journal of Mechanical Engineering and Technology (IJMET)*, 9(7), 235-243.
- Erdenetsetseg, E., Purevjal, T., Chogsom, A., & Erdene, A. U. B. (2019), Effective use of digital marketing for brand building.
- Broughton, A., Foley, B., Ledermaier, S., & Cox, A. (2013), The use of social media in the recruitment process. *Institute for Employment Studies*, 3(13), 1-42.
- Anute, N. B. (2019), A Study on perception of job seekers about digital marketing tools used for recruitment process. *Int. J.*, 360.

ANNEXURE Questionnaire

9/9/22, 12:42 AM

A survey on Digital Marketing in Recruitment Industry

A survey on Digital Marketing in Recruitment Industry

* Required

1. Gender *

Mark only one oval.

- ☐ Male
☐ Female

2. Age *

Mark only one oval.

- ☐ 18-21
☐ 22-25
☐ 26-29
☐ 30-33

3. Education Qualification *

Mark only one oval.

- ☐ Hsc
☐ Graduate
☐ Post-Graduate

4. Rate the chances of enhancement of your perception about a brand as a result of its digital presence. *

Mark only one oval.

	1	2	3	4	5	
Low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High

5. How likely are you to follow a social media page posting engrossing content related to recruitment *

Mark only one oval.

	1	2	3	4	5	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most likely

6. How likely are you to open and read a recruitment firms Email/Newsletter. *

Mark only one oval.

	1	2	3	4	5	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

7. What are the chances that you will open a page/website of a recruitment firm advertised on social media. *

Mark only one oval.

	1	2	3	4	5	
Low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High

8. How likely are you to open an advertised search result of a recruitment firm on a search engine *

Mark only one oval.

	1	2	3	4	5	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most likely

9. How likely are you to trust a recruitment firm's website if it ranks higher in the search engine results *

Mark only one oval.

	1	2	3	4	5	
Most Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most Likely

10. What are the chances that you will have a favourable image about a recruitment firm if a renowned person/page/channel promotes its website/social media handles. *

Mark only one oval.

	1	2	3	4	5	
Low	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High

11. What type of social media content appeals to you the most *

Mark only one oval.

- ☐ Photo
- ☐ Video
- ☐ Written
- ☐ Gamified

12. Do you think a well designed and optimized website is necessary to have a favourable image of the company *

Mark only one oval.

- ☐ Yes
- ☐ No

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Google Forms

Ergonomics Applications in Tool Room

Aijaz Jafri

Assistant Professor, Durgadevi Saraf Global Business School, Mumbai

ABSTRACT

This paper throws light on ergonomic evaluations of various tool room operations. Tool room operations can be very demanding tasks, mentally as well as physically, leading to various health related problems in operators. Most common problems include Musculoskeletal disorders (MSDs) resulting in injuries or illnesses to soft body tissue such as Muscles, Nerves, Tendons, Ligaments, Joints, Cartilage and Spinal Discs.

The injuries if not attended at the right time will results in higher medical compensation and absenteeism causing loss in productivity and hampering overall working of the tool room. Ergonomic is the science of designing equipment, workstations and works tasks to suit to the physical capability of the worker so as to enable him to perform his task safely without damaging his body.

The primary goal of this research work is to study the application of ergonomics in a tool room and its evaluation with regards to different tool room tasks.

Keywords: Tool Room, Ergonomics, Musculoskeletal disorders (MSDs)

INTRODUCTION

Ergonomics is derived from two Greek words meaning “work” and “natural laws”. Ergonomics is a science that involves application of psychological and physiological principles to the design of products, workstations, and systems. The goal of ergonomics is to reduce injuries, increase productivity, and enhance safety by designing or arranging workplaces, products and systems so that they fit the people who use them.

Ergonomics aims to learn about human abilities and limitations, and then apply this learning to improve human interaction with products, workstations, systems and environments so as to ensure that these are designed for human body’s requirements.

Ergonomics uses the following sciences

- anthropometry: body sizes, shapes; populations and variations
- biomechanics: muscles, levers, forces, strength
- environmental physics: noise, light, heat, cold, radiation, vibration
- body systems: hearing, vision, sensations
- applied psychology: skill, learning, errors, differences
- social psychology: groups, communication, learning, behaviours.

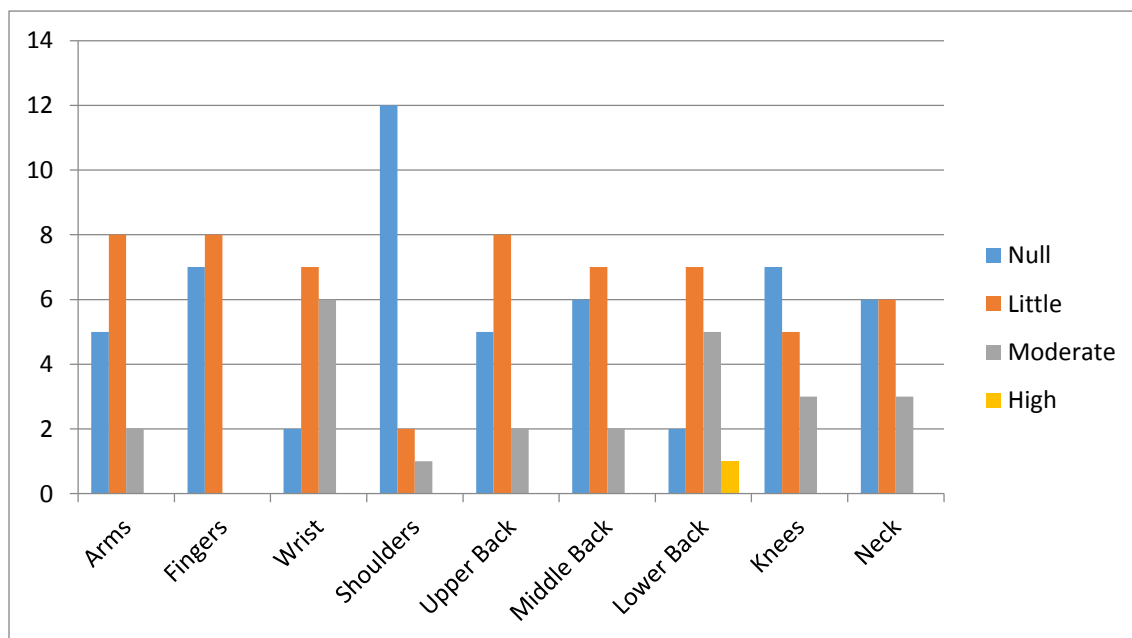
PROBLEM DESCRIPTION

The work stations studied in this tool room use manual lifting for setup and assembly. The shift timings including overtime is 12 hours from Monday to Saturday.

The tool room had no availability of medical data, records of complaints, accidents or injuries concerning these operations. Pain and discomfort survey was conducted among 15 workers with average height 5' 5'' and average age was about 30 years. Intensity of pain was classified in four category, null, little, moderate and high. High impact body parts were identified and classified as shown in the graph.

OBSERVATIONS AND FINDINGS

It was also observed, that there was no safety protocols as well as ergonomics awareness amongst the workers and management. The data points out the pain severity in certain body parts like wrists, fingers, arms knees and back. Since the tool room activities doesn't have overhead lifting, shoulder pain was found to be of minimum concern. The tabulated observations are shown below



	Arms	Fingers	Wrist	Shoulders	Upper Back	Middle Back	Lower Back	Knees	Neck
Null	5	7	2	12	5	6	2	7	6
Little	8	8	7	2	8	7	7	5	6
Moderate	2	0	6	1	2	2	5	3	3
High	0	0	0	0	0	0	1	0	0

WORKSTATION STUDY AND SOLUTIONS

The workstation should be designed to adjust the body of the operator. Anthropometry is the measure of physical human traits that is applied to determine allowable space and equipment size and shape used for the work environment. Factors that are considered include agility and mobility, age, sex, body size, strength, and disabilities. Engineering anthropometry applies these data to tools, equipment, workplaces, chairs and other consumer products, including clothing design. The goal is to provide a workplace that is efficient, safe and comfortable for the worker.

The design of workstations should be based upon anthropometric data, behavioral patterns of employees and specific requirements of the work being done. For example, the height at which work takes place is important in designing workstations. Work should be located to suit the height of the operator, whether sitting or standing. If the work is located too high, the neck and shoulders may suffer due to the shoulders frequently being raised to compensate for the incorrect height. If the work is located too low, a backache can result from required leaning and bowing the back. Adjustable work tables allow operators to determine a comfortable working height. Anthropometric dimensions can also be used in workplace layout to optimize vertical and horizontal reaches and grasps.

Lighting of a proper intensity is essential to adequately perform visual tasks and to reduce worker fatigue. Factors that influence lighting design for a task include nature of work, appearance, economics, building costs, energy consumption and the quality of lighting desired. Factors affecting the visual environment include lighting fixtures, visual tasks, lighting maintenance, lighting system design and the individuals' eyesight.

SUGGESTIONS AND RECOMMENDATIONS

Based on the above study based on Ergonomics in housekeeping following suggestions and recommendations can be made:

- On the job training should be provided to the operators to make them aware about the ergonomics practices.
- The training should be based on proper use of equipment so as they do not exert the body too much resulting in MSD
- Workers should be given PPE's specially steel toe shoes to ensure zero injury and adherence to safety
- Ergonomic hand tools should be used as much as possible for minimizing wrist injuries

Workstation Height and Illumination



Workstation standing platform



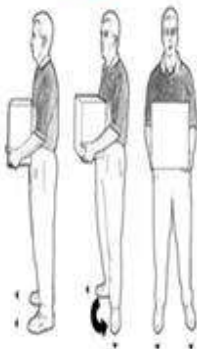
Moving WIP between workstations



Proper Lifting Technique



No twisting while moving load



Proper way of lifting load



Source: Google Images

REFERENCES

- Article retrieved from <https://safetyresourcesblog.files.wordpress.com/2014/11/a-guide-to-ergonomics.pdf>
- Article retrieved from http://training.itcilo.it/actrav_cdrom2/en/osh/ergo/ergonomi.htm
- Joshi, S. (2016) To study the relationship between ergonomics & efficiency of the housekeeping employees at workplace, Atithya: A journal of hospitality volume 2, issue 1,
- Article retrieved from https://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Ergonomics.pdf

Study and Analysis of Waste Generation during the Processing of Materials in Textile Spinning Process

Niranjan Shinde

Student, MMS Operations, Durgadevi Saraf Institute of Management Studies

ABSTRACT

Waste minimization is the application of a systematic approach for reducing the generation of waste at the source. Waste minimization applies to hazardous materials, non-hazardous materials, water, energy, raw materials, all waste emissions, and other resources. During yarn formation, worsted wool fabric being processed over various machines in the spinning section leads to soft and hard waste generation at different stages. This research focuses on each process in the spinning department starting with the Preparatory (Gilling, Roving), Spinning (Ring Frame), and Post-Spinning (Auto-coners, Doubling). Then Pareto Analysis (80/20 Rule) is used to determine the factors causing 80% of the waste generation. The Fishbone/Ishikawa diagram is used to highlight the contributing causes of waste generation and to suggest corrective measures.

Key Words: *Waste minimization, worsted wool fabric, Ring Frame, Ishikawa diagram, spinning.*

INTRODUCTION

Manufacturing is a process of transformation of raw materials into a valuable and commercial product to satisfy the needs of consumers. Meaning that manufacturing is responsible for converting the resources inputs into useful outputs. The yarn manufacturing or spinning process is the process of converting fibers into yarns. Different types of fibers (such as cotton, wool, and flax) and synthetic fibers (such as nylon and polyester) are converted into yarns. The yarn manufacturing process involves mechanical processes that need large amounts of energy; to generate soft waste, hard waste, and noise. We focus on wool yarn and wool-blended worsted yarn in+ spinning department waste management and focus on the major reasons for waste. With the ever-increasing price of worsted wool fabrics, huge investments in sophisticated machines, and increasing labor wages, it is a highly challenging task for any spinning mill to enhance productivity. To survive the huge competition, it is incurred the yarn manufacturing processes must under controlled. The waste occurring within the spinning mill are often classified normally as soft waste and hard waste.

LITERATURE REVIEW

“A Study on Energy Conservation in Textile Industry In the textile mill” by Y. Dhayaneswaran & L. Ashokkumar (2013), electricity consumption is increasing trend, due to modernized machines and continuous usage of the equipment, inefficient operating parameters. The energy cost is around 15 % to 20 % over the production cost and it stands next to raw material cost. The ring spinning region is contributing around 50 % of the total installed power.

(Ipek Yalcin-Enis, Merve Kucukali-Ozturk & Hande Sezgin, 2019) World textile production has been consistently increasing in recent years. Global population growth and rising living standards have caused an increase in textile demands as a natural consequence of basic needs and have also resulted in the overconsumption of fast fashion trends. The general outline of this review includes the main topic such as the types of textile waste, in this, it was found that 35% of the initial input is lost before the product reaches the consumer. Thus, the management of textile waste has gained importance, and developing nations should spend a major part of their municipal revenues on waste management.

OBJECTIVES

- To increase productivity.
- To maintain the quality of finished goods.
- To increase profitability.
- Reducing environmental impact by producing less waste.

SCOPE OF RESEARCH

The primary aim of this research project is to create and build awareness among textile fashion companies and other members of the whole value chain of fashion products to use sustainable materials in the product life cycle. It reduces the company's time and money for managing and handling generated waste. Reducing waste not only saves money on costly waste but also demonstrates industry leadership and contributes to corporate social responsibility by reducing waste.

METHODOLOGY

The research work is based on primary data. The study is done on the data, for a better understanding of which factors are more responsible for waste and analysis for reducing waste generation. For the research, we took four dyeing schemes with a total of 54 batches with different weights. And then uses Pareto Analysis and Fishbone Diagram

BACKGROUND OF THE COMPANY

The textile company selected for the case study is Raymond located in Jalgaon, Maharashtra. The company has been established in April 1925. Wool, which was a primary raw material for Raymond, had to be imported from Australia

SPINNING DEPARTMENT

The processes in the spinning department are as follows-

1. **TOP CONDITIONING-** When the tops come from the recombing department they are stored for conditioning in the trolley. The conditioning room is an enclosed one and humidifiers are installed for conditioning the tops
2. **GILLING-** In this step, a sequence of gilling machines is used to process the combed sliver/top. The top that is received is not uniform because packing during the transportation is compact. So, this gilling machine helps to maintain uniformity
3. **ROVING-** In this process, a false twist is inserted in the material so that it has some strength which is necessary for further yarn spinning without frequent breakages
4. **RING FRAME-** The machine in which the final draft is given to the roving and converted to yarn is called a ring frame.
5. **STEAMING-** If there is twisting with wool and any other material like polyester then to set the imparted twist steaming is important
6. **AUTO WINDING-** In auto winding bobbins from the Ring-frame are wound on one roll means transferring yarn or thread from one type of package to another type of package and during wounding removal of various faults like neps, slubs, thick or thin places, etc. takes place
7. **PLY WINDING-** The process of combining two individual yarns without twisting
8. **TFO (TWIST FOR ONE)-** The twisting of these combined yarns is called the yarn doubling process. To improve the yarn's tensile strength, increase the yarn's softness, reduce the yarn's hairiness, improve the yarn's moisture-absorbing capability, cut the sizing process during weaving, and improve the evenness of the yarn.

REASONS FOR WASTE GENERATION DURING THE PROCESS

In Gilling, there have 5 machines those are GN/GC-1, -2, -3, -4, and GV 20. The waste produced on those machines is soft waste and the reasons for waste are

- Cot roller Lapping
- Faller Lapping
- Uster % is high
- Coiler jam because of oil
- Nip Lapping
- Bad working of material (Blend composition, moisture)
- Scratches on cot roll

On Roving machines most of the waste is produced due to the following reasons

- Lapping
- Mechanical breakdown and failures.
- Hairiness and fly
- Oil is more in material

Now on the Ring frame, the reasons for waste are as follow

- Slubs
- Lapping on bottom roller
- Neps
- Hairiness
- Thick and thin places
- Multiple ends break due to suction nozzle jam
- Bobbin building mechanism failure
- A slough of bobbins
- Yarn breakage rate is high then there will be suction of yarn
- Time is taken in attending to the yarn breakage.
- Working practice and culture.
- Housekeeping and material handling.
- Mechanical breakdown and failures.
- Methods of attending to the breakdowns

Auto-corner waste is because of thick and thin places in yarn, neps, etc.

In all this, there will be a sweeping waste also.

RESULTS AND DISCUSSION

After the processing of 54 Batches in the spinning department, 24 of them get high % of waste than the standard waste. The table shows the Standard waste percentage given by the company for each Batch and the waste percentage which is actually produced during the process.

Table No. 1 Source: Researcher's primary data

Batch	Standard Waste %	Actual Waste % after delivery	Reason for waste
Q99003	6.43%	7.70%	Because of high uster, there will be a reprocess of top
Q99004	11.67%	14.50%	Because of high uster, there will be a reprocess of top
Q99006	8.85%	11.20%	Lapping on the bottom roller (ring frame machines)
Q99008	8.12%	8.50%	Lapping on the bottom roller (ring frame machines)
Q99009	6.88%	13%	Lapping on the bottom roller (ring frame machines)
Q99029	7.27%	10.40%	Lapping on the bottom roller (ring frame machines)
Q99030	8.33%	9.10%	Lapping on the bottom roller (ring frame machines)
Q99072	8.87%	9.10%	Cot roller Lapping on GN1
Q99074	11.67%	13.20%	Roving Mechanical breakdown and failures
Q99075	8.33%	8.80%	Cot roller Lapping on GC2 Machine
Q99079	10.00%	19.40%	Faller jam GV20
Q99080	7.38%	9.40%	Lapping problem GV20
Q99168	8.79%	9%	Lapping on the bottom roller (ring frame machines)
V85452	9.96%	10.50%	Cot roller Lapping on GN1
V85776	6.11%	7%	Lapping on the bottom roller (ring frame machines) and due to yarn cut suction of yarn
Q99122	7.16%	10.60%	Lapping on the bottom roller (ring frame machines)
Q99134	6.95%	7.80%	Lapping on the bottom roller (ring frame machines)
U98932	8.10%	8.55%	Lapping on the bottom roller (ring frame machines) and due to yarn cut suction of yarn
V85800	6.98%	7.30%	Cot roller Lapping on GN1
V85807	6.98%	7.30%	Cot roller Lapping on GN1
U98925	5.45%	5.60%	Cot roller Lapping on GN1
U98859	5.58%	12.88%	Lapping on the bottom roller (ring frame machines) and due to yarn cut suction of yarn
U98937	5.35%	5.76%	auto cuts
U98939	5.51%	10.41%	Cot roller Lapping on GN1

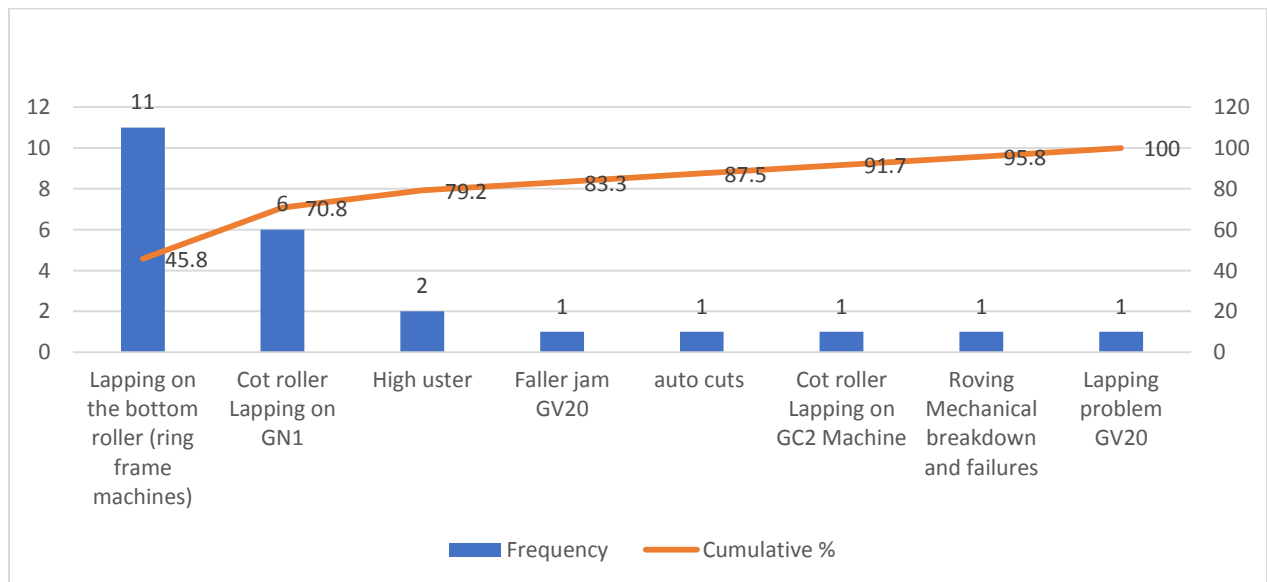
PARETO ANALYSIS

Table No. 2 Source: Researcher's primary data

Waste Reason	Frequency	Cumulative Frequency	Cumulative %
Lapping on the bottom roller (ring frame machines)	11	11	45.8 %
Cot roller Lapping on GN1	6	17	70.8 %
High Uster	2	19	79.2 %
Faller jam GV20	1	20	83.3 %
auto cuts	1	21	87.5 %
Cot roller Lapping on GC2 Machine	1	22	91.7 %
Roving Mechanical breakdown and failures	1	23	95.8 %
Lapping problem GV20	1	24	100.0 %

PARETO CHART

Graph No. 1 Pareto Chart



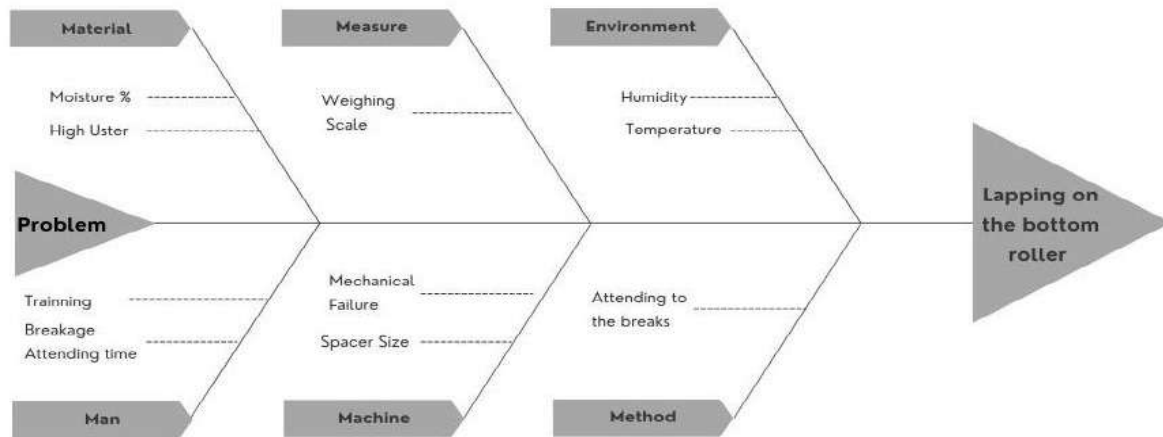
The above Pareto Analysis shows that the Lapping on the bottom roller (Ring Frame Machines), Cot roller Lapping on GN1, and High Uster are the reasons that make maximum waste.

Now the measure problems get detected, the fishbone diagram helps to identify cause and effect relationships

FISHBONE DIAGRAM

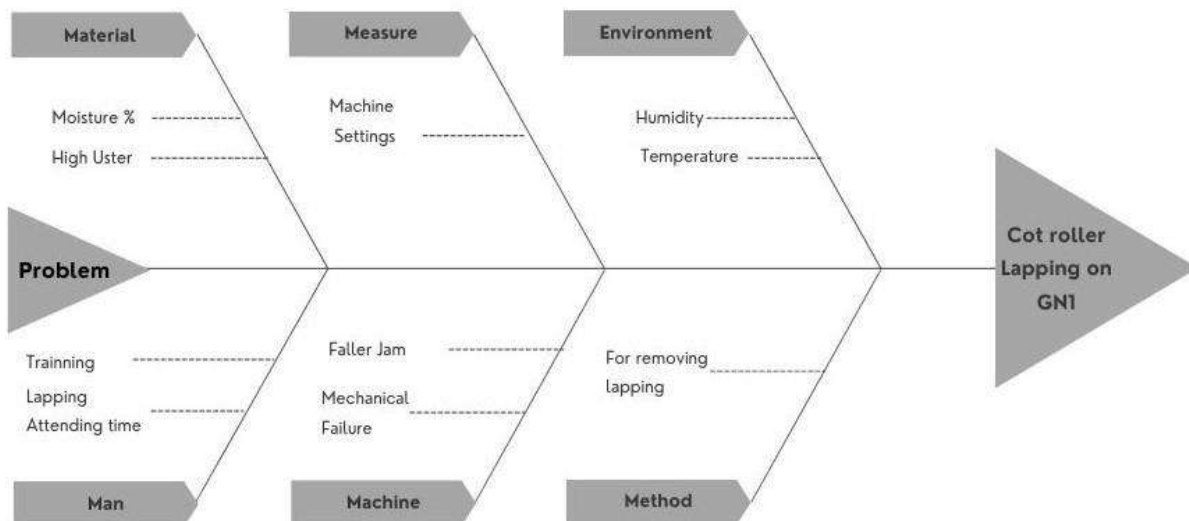
Fishbone Diagram for Lapping on the bottom roller (Ring Frame Machines)

Figure 1 :- Fishbone Diagram for First Reason



Fishbone Diagram for Cot roller Lapping on GN1

Figure no.2 Fishbone Diagram for Second Reason



CONCLUSION

It's a case specific research that acts as a template for other textile companies or in other textile industries also. The Pareto analysis and Fishbone diagram give a better perspective of the issues that led up to unintentional waste generation. Through analyzing the diagram, one can conclude that the problems related to waste generation are maximum due to Lapping on ring frames and cot roller lapping. Proper recording of waste shade-wise, because mixed waste recording makes it hard to attain the problem or solve. Some shades required a change in machine setting rather than a given standard setting.

REFERENCES

- Ashokkumar, Y. D. (2013). A Study on Energy Conservation in Textile Industry. *Journal of The Institution of Engineers (India): Series B*, 53-60.
- Ipek Yalcin-Enis, M. K.-O. (2019). Risks and Management of Textile Waste. In J. S. Eric Lichtfouse, *Environmental Chemistry for a Sustainable World*. Springer, Cham.
- Karthik, G. T. (2016). *Process Control and yarn quality in spinning*. New Deelhi: Woodhead Publishing India Pvt. Ltd.
- *Ring frame*. (n.d.). Retrieved from <https://www.textilesphere.com/2019/10/faults-in-ring-frame-causes-and-remedies.html>.
- Shahid, D. M. (2017, August 13). *Textile Today*. Retrieved from www.textiletoday.com: <https://www.textiletoday.com.bd/waste-minimization-textile-industry/>

Agile Transformation: A Sustainable Competitive Advantage for Businesses in VUCA Conditions

Dr. Vivekanand Ankush Pawar

Associate Professor, MES's Pillai Institute of Management Studies and Research, Mumbai

Ketki Vivekanand Pawar

Visiting Faculty, Management

ABSTRACT

For the past two years, many business organizations can agree to the fact that the COVID-19 pandemic has been acting as a change catalyst and accelerated the pace of digital transformation. Not only the digital transformation, the business leaders also faced the harsh reality that under all the uncertain and disruptive situations, there was a need to improve the organization from within, to sustain the business.

Value-creating and value-protecting opportunities can be successfully achieved by adopting the agile operating model, which has the ability to quickly and efficiently reconfigure strategy, structure, processes, people and technology. An agile organization adds pace and adaptability to stability, thus creating a critical source of competitive advantage in volatile, uncertain, complex and ambiguous (VUCA) conditions.

The research design for this research paper is qualitative research in nature, based on secondary data, through case study method. This research paper attempts to study the construct "Sustainability of Agile Organization in VUCA Environment", through the case study of Allianz Turkey. This research paper adopted the intrinsic case study method, as the quest of the researchers was to study how the organization under study transformed themselves into agile organizations, what agile practices did they implement and how they reaped the benefits of their success.

Keywords: *Agile Organization, Competitive Advantage, VUCA Conditions, Sustainability, Agile Practices*

INTRODUCTION

"It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change." by Charles Darwin

"To improve is to change; to be perfect is to change often."

By acting as a catalyst for change, the COVID-19 pandemic has actually accelerated the pace of digital transformation for many businesses by increasing agility and building resilience

within their organisations. Under all the uncertain and disruptive situations, many business leaders all over the world were facing the harsh reality about the necessity to go for digital transformation in order to sustain their businesses. Not only digital transformation, but the business leaders were forced to think what needs to improve inside their own organizations.

There was a need for businesses to become more agile for them to react to persistent changes, that arises as a result of the volatile, uncertain, complex and ambiguous (VUCA) conditions. Thus, agility became the buzz word for doing things better and now it has become a business imperative. Bernardes and Hanna (2009) described agility, as a strategy for managing unpredictable turbulence. It is strength of a business to deal in turbulent environment with uncertain situations and is concerned with dynamic capabilities of the business. The business practices or models which are agile in nature enable an organization to generates and conveys value to customer and what used as a tool to gain the value (Teece et al, 2016).

The organizations need to change the way of doing the work, from where would their employees choose to work, how engaged the organizations are with the technology and the way they think about their customers, all these lead to a factor called Organizational Agility (OA). According to Teece et al (2016) Organizational Agility (OA) is capability of the business to transform its assets into value for customers operating in the volatile internal and external environments.

To sustain and succeed in today's uncertain, volatile and complex world, many leading companies are gaining substantial benefits by accepting and adopting agility at scale.

OBJECTIVES

1. To study the difference between Digital Transformation and Agile Transformation.
2. To understand why agile transformation is becoming important for business sustainability in VUCA conditions.
3. To study the five pillars (characteristics) of an agile organization.
4. To study the organizational agility practices successfully implemented by agile organization, through the case study of Allianz Turkey.

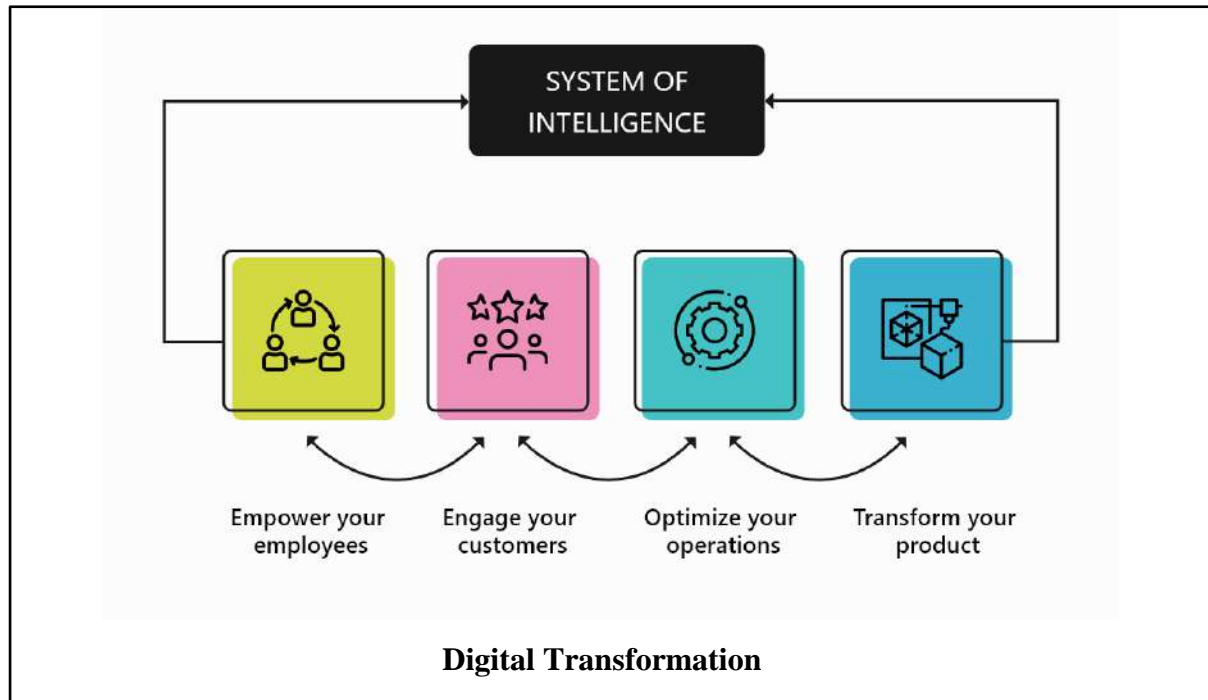
REVIEW OF LITERATURE

Difference between Agile Transformation and Digital Transformation

Before exposing new opportunities to deliver new efficiencies, and adopting the new business model of transformation, the organizations must understand the difference between agile transformation and digital transformation and then choose the type of transformation that can operate their business.

Digital Transformation

Digital Transformation happens when the digital technology is used by the business to change their manual processes with digital processes, so as to create modified business processes and to improve customer experience to meet the market requirements. With the advancement in the digital technology, when the older digital technology is replaced with the newer digital technology, this is called Digital Transformation.



It is the new technology which is the dynamic component of digital transformation methodology. When emerging technologies influences the customer-oriented processes of the business, a successful digital transformation is completed.

Digital transformation provides digital solutions, empowers the employees, engages the customers, optimizes the operations and transforms the product, to add efficiencies through automation. It is a foundational change in the organization that delivers value to its clients.

From records on register books or papers to Excel Spreadsheets to Google Spreadsheets where we can work simultaneously even from remote places or from printouts of bank statements to digital print on the passbooks to e-passbooks on our mobile phones through the bank's apps, with digital technology on our side, this Digital Transformation has always given us a chance to reimagine how we do business and engage our clients and customers.

Thus, when the organization undertakes a digital transformation, it goes beyond the business boundaries towards how an organization goes to market and communicates with customers.

Benefits of Digital Transformation

The organizations that are going for digital transformation should invest in the right technologies, then only can they deliver expected customer outcomes and make the transformation worth the effort.

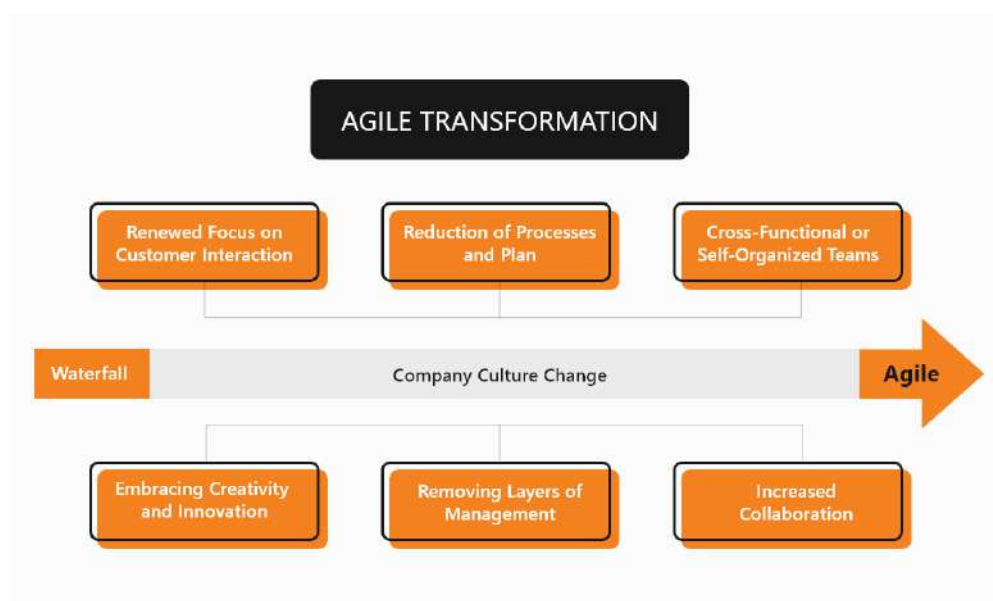
Some benefits of Digital Transformation include:

- End to end hassle-free user experience.
- Greater resource management
- Opening the door to globalization
- Automated workflow processes that boost the organization's efficiency.
- Digitalization of business operations
- Innovative services and new products for the growth of new and existing market opportunities.

Agile Transformation

When an entire organization is transformed into a well-designed environment based on Agile principles, that help them to succeed in a collaborative, flexible, self-organizing and fast-changing environment, it is called Agile Transformation. For the developed teams to reap the benefits from the rewards of healthy agility, the agile principles have to be taught throughout the organization. It becomes essential for the entire organization not only to change their mindset, but also to accept and adopt a culture of self-organization and collaboration.

During the turbulent times, with the required support and resources, Agile transformation permits the organizations to be more reactive in response, so as to better serve their clients' interest with less efforts.



According to McKinsey & Company (2017), “An agile organization (designed for both stability and dynamism) is a network of teams within a people-centered culture that operates in rapid learning and fast decision cycles which are enabled by technology, and that is guided by a powerful common purpose to co-create value for all stakeholders.”

Value-creating and value-protecting opportunities can be successfully achieved by adopting the agile operating model, which has the ability to quickly and efficiently reconfigure strategy, structure, processes, people and technology. An agile organization adds pace and adaptability to stability, thus creating a critical source of competitive advantage in volatile, uncertain, complex and ambiguous (VUCA) conditions.

When the organizations transform from the traditional, Waterfall Model methodology to Agile Model, the culture of the organization changes. Waterfall Model methodology which is also known as Linear Sequential Life Cycle Model, is followed in the sequential order, and so project development team only moves to next phase of development or testing if the previous step is completed successfully.

Whereas, Agile methodology is a practice that helps continuous iteration of development lifecycle by separating it into sprints and test plan is reviewed after each iteration or sprint. Thus, in this model, development and testing activities are concurrent, unlike the Waterfall model. This process allows more focus on customer interaction, reduction of processes and plans, embracing creativity and innovation, removing layers of management and going for cross-functional or self-organized teams with increased collaboration among themselves.

Advantages of Agile Transformation

The agile transformation model is executed in a top-down manner and works best if imposed in a bottom-up approach.

If agile transformation is implemented correctly, it can bring tremendous benefits such as:

- Protection against the errors generated during project implementation because of efficient collaboration between testing and development teams.
- Great communication and engagement
- Cost control and risk reduction
- Shorter time to market and flexibility in product delivery.
- Ability to immerse change without disrupting the development process.
- Complete transparency
- Healthy organizational culture with more self-reliant employees.

Why Agile Transformation?

With the digital revolution that is transforming industries, economies and societies, many businesses are facing organizational challenges. Moreover, due COVID-19 pandemic, many

governments across the world imposed travelling restriction. As a result, businesses to sustain in such turbulent times adapted the digital transformation, with the change in the work environment, like work remotely or work from home, the need to maintain healthy organizational culture, to maintain great communication with the employees and to engage and retain them is becoming more challenging.

The reasons why businesses today are adopting agile transformation are highlighted below:

Commoditization of Technology

Commoditization occurs when the latest innovations lose their lust and become a part of expected daily life. The result of this process is dropping prices and a rise in competition among those who provide the service or goods. Since the dawn of the digital age, technology has continued to move forward, but older innovations, such as laptops, and services, such as coding, are now cheaper and more readily available because they have turned into a commodity.

Businesses and industries are replaced

Constant introduction of disruptive technology. Established businesses and industries are being commoditized or replaced through digitization, bioscience advancements, the innovative use of new models, and automation. Examples include developments such as machine learning, the Internet of Things, and robotics.

Distribution of information has changed

The volume, transparency and distribution of information has increased exponentially, as a result organizations today need to adopt to the accelerating pace of digitization and democratization of information, so as to engage their stakeholders, like their customers, partners and colleagues in multidirectional communication and complex collaboration.

The need to acquire and retain the best talent

Creative-based, knowledge-based and learning-based organizational tasks are becoming more important, as a result organizations need a distinctive value proposition to acquire and retain the best talent, which is often more diverse in origin, thoughts, composition and experience, and may have different desires, as they can be millennials and generation z.

Five Pillars of Agile Organizations

1. Shared Purpose and Vision

Agile organizations give consistency and emphasis on their value creation models, by setting a shared purpose and vision, across the organization, so the all their stakeholders feel personally and emotionally invested. Agile organizations focus on what their stakeholder

wants and have a clear understanding of the ways in which they are going to create values for their stakeholders.

Agile organizations that combine a deeply rooted purpose and vision with the flexible and distributed approach to value creation are quick in sensing and seizing the opportunities. People across these organization proactively watch for the changes in customer preferences and the external environment and act upon them immediately. They try to search for these preferences through stakeholder feedback, like customer feedback, supplier feedback and other inputs like, product reviews, crowd sourcing and hackathons. They also use tools like surveys, customer journey maps to identify new opportunities, so as to serve their customers in better ways.

These organizations constantly scan the environment, regularly evaluate the progress of their initiatives and are flexible and swift in allocating the resources to where they are needed the most. They use standardised and fast resource-allocation processes and shift their people, technology and capital very quickly between slowing businesses and into the areas of growth. These organizations built and implement models that use clear metrics to allocate the resources to initiatives for specified time periods and are reviewed regularly.

Senior leaders of agile organizations play an important role by bringing consistency across the distributed systems and by proving a clear and actionable strategic guidance regarding the priorities and the results that are expected at team level as well as at the system level. These leaders ensure that everyone is focused on delivering value to customers and other stakeholders, so that they work towards achieving the expected team outcomes.

2. Network of Empowered Teams

An agile organization encompasses a dense network of empowered teams that operate with high standards of alignment, accountability, expertise, transparency, and collaboration. However, to ensure smooth operations, the organization must provide a stable ecosystem for these teams. When a clear responsibility and authority is given to the teams, the team members will be highly engaged, will take care for each other, will try to come out with creative solutions to deliver the expected outcomes.

Agile organizations implement clear and flat structure, where the teams are clustered into focused performance groups, usually called as “tribes” or a “lattice” that share a common purpose and strive to achieve common goals. The organization need to ensure that people have clear and accountable roles and they can interact across the organization and focus on getting the work done without losing any time or waiting for the manager approvals. In agile organizations, people proactively and immediately address any lack of clarity about roles with one another, and they very well know that their roles can be shared and that people can have multiple roles.

In agile organizations, decision-making is decentralized, where decisions are made as close to relevant teams as possible, which makes the team highly productive. The senior leaders can focus on overall system design and provide guidance and support to these teams, who are empowered to focus on day-to-day activities.

In agile organization, functions evolve to become robust communities of knowledge and practice, attracting and developing talent, sharing knowledge and experience, and providing stability and continuity over time as people rotate between different operating teams.

3. Quick Decision-making and Learning Curve Implementation

In a constantly evolving environment, the best way to minimize risk and succeed is to embrace uncertainty, be quick in decision-making and be more productive in trying new things. Agile organizations work in rapid cycles of thinking and doing that are closely aligned to their process of creativity. At the enterprise level, agile organization uses the rapid-cycle model to accelerate strategic thinking and execution. Instead of the traditional annual planning, budgeting and review, these organizations implement dynamic management systems like Objectives and Key Results (OKRs) and rolling 12-month budgets.

At the team-level, the teams are empowered, so that they can focus on rapid iteration and experimentation, often in one- or two-week “sprints”. During these sprints, the team holds frequent check-ins to share progress, solve problems and ensure alignment. Between sprints, team members meet to review and plan, to discuss progress to date, and to set the goal for the next sprint. However, to accomplish this, team members must be accountable for the end-to-end outcome of their work. To enable them to make quick decisions, they are empowered to seek direct stakeholder input, so as to serve all the needs of a group of customers in a better way in the shortest time. This rapid and structured approach to innovation not only saves time, but also reduces rework and creates opportunities for creative solutions. As a result of this empowerment, there is an increase in the sense of ownership, accountability and accomplishment within the team.

To facilitate interaction and communication between teams, agile organizations deploy standardized ways of working, including the use of common language, processes, meeting formats, social-networking or digital technologies and dedicated, in-person time, where teams work together for all or part of each week in the sprint.

Agile organizations are performance-oriented by nature. They explore consequence-management approaches based on shared goals across the end-to-end work of a specific process or service and measure business impact rather than activity. Agile organizations ensure full transparency of information, so that every team can quickly and easily access the information they need and share information with others.

The team members also need to be open and transparent with one another, to enable them to collaborate with others in the organization that have relevant knowledge, openly sharing

ideas and the results of their work. This creates an environment of psychological safety where any and all issues can be raised and discussed with anyone.

4. Self-motivated People Model

In an agile organization, the leaders effectively empower employees to take ownership and they are motivated with confidence to drive the organization towards fulfilling its share purpose and vision. The organizational culture in an agile organization is such that, people are at the centre, thus engaging and empowering everyone in the organization, so as to create value in a collaborative, quick and effective way.

The entrepreneurship and skill building that is needed for agility to happen is fostered by a strong community which supports and helps in improving the organizational culture and the underlying people processes. Here the emphasis is on the organizational leadership which serves the people by empowering and developing them. Instead of directing and controlling, the leaders in agile organizations impart coaching and act as mentors to motivate people to work in collaborative ways and involve them in the strategic and organizational decision-making processes.

5. Adopting Current Technology

Agile organizations are required to digitalize their traditional products and services to meet the changing customer needs and to have the competitive advantage, which requires rapid evolution of the operating processes, technology architecture, systems, and tools. Agile organizations implement modular-based, cloud-based storage and services, user friendly software architecture, which reduces the handovers and interdependencies, that reduces production cycle time.

Cross-functional teams are formed by integrating the business development and technology employees, to design, build, implement and support the next-generation technology. To understand the customer needs and quickly provide solutions to them, these teams use crowd sourcing, hackathons and virtual collaboration spaces.

RESEARCH METHODOLOGY

The research design for this research paper is qualitative research in nature, based on secondary data. Qualitative research involves an interpretive, naturalistic approach to the world which is studying things in their natural settings and attempting to make sense of or interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2005).

Case study research, most often associated with qualitative inquiry has gained significance as an effective approach to investigate complex issues in real-world settings. This research

paper attempts to study the construct “Sustainability of Agile Organization in VUCA Environment”, through the case study of Allianz Turkey.

This research paper adopted the intrinsic case study method, as the quest of the researchers was to study how the organization under study transformed themselves into agile organizations, what agile practices did they implement and how they reaped the benefits of their success.

The secondary data is collected from various websites, journals, reports and published interviews by McKinsey & Company.

THE CASE STUDY

Creating an Agile Organization: Case Study of Allianz Turkey

According to the interview published by McKinsey and Company, Batu Oncu and Mehmet Yenigun (2020), Tolga Gürkan and Aylin Somersan Coqui explain how Allianz Turkey pursued a multiyear agile transformation and is now reaping its benefits. Tolga Gürkan, Allianz Turkey’s current CEO and the one who led this transformation effort, and Aylin Somersan Coqui, Allianz Turkey’s former CEO (now Allianz’s global chief risk officer), initiated the agile transformation.

McKinsey team asked Ms. Aylin Somersan Coqui, what encouraged her and the leadership team to undertake such a large-scale transformation initiative. According to Ms. Somersan Coqui, the success goes to their organizations’ functional structure, which over the years had built functional excellence across key elements of the insurance value chain, such as pricing and claims, which ensured sustainable, profitable growth. Allianz actively managed the adverse situation by adjusting their business mix, collaborating with their distribution partners, and further optimizing their risk model. Daily stand-up meetings, close collaboration among departments, full transparency on actions, and focused execution helped them to successfully navigate a difficult situation.

Allianz had certainly adopted the agile mindset to this initiative. This realization and experience made the leadership team believe that a large-scale agile transformation would solve many of these issues in all business lines and strongly position Allianz for the next phase of their growth.

The Journey of Agility Journey at Allianz Turkey

Allianz had already experimented with agility as they modernized their core IT platform. More than 100 people were involved in a multi-country effort, and they were very happy with how effectively the teams collaborated and delivered results in a timely manner. They saw a significant increase in speed, on-time and within-budget delivery, as well as an increase in motivation and empowerment across teams. Employees who worked in an agile environment

enjoyed it so much that they did not want to go back to their functional environments. Encouraged by this experiment, they created a plan for rolling out agile practices across the organization.

Scaling up of Agile Allianz

Before scaling up, they decided to first run a pilot with motor insurance, which was and still is one of Allianz Turkey's largest businesses by gross written premiums. They have chosen motor insurance due to its rapidly changing and demanding market conditions. They also knew that, with their existing resources, they could form cross-functional teams with end-to-end accountability.

They transformed their motor business organization into an agile 'tribe' and closely monitored the working model for six months, incorporating lessons learned as they designed the remaining tribes. Consequently, they designed and launched three additional product tribes plus a digital tribe and a central IT tribe. For them, designing a tribe was not only about structuring squads and chapters. They thought long and hard about answering some of the key questions that arise when undergoing such a large-scale transformation. One was about how to align strategic priorities of tribes and manage their dependencies. To address this, they built a comprehensive business review process and a number of alignment ceremonies—these are planning meetings where different agile and non-agile teams set expectations, manage dependencies, and actively collaborate to achieve business results. A second question was around designing a brand-new people model in a completely flat organization. For this, they launched new career paths and consensus-driven performance management mechanisms to provide clear routes for individual growth for their people in an agile world. Finally, they needed to rethink how they design their IT teams to both maintain a strong IT backbone and offer the flexibility that tribes need. They therefore introduced a new IT organization where the IT backbone and delivery teams were completely segregated.

The Challenges Involved in Scaling-up Agility

The enterprise agile transformation was surely one of the most challenging organizational transformations they have been through. It was not definitely straightforward and there were many critical decisions involved, but two topics were most crucial for them.

The first was effectively managing the narrative during the vision-building and pilot phases. Like any organizational change program, agile transformation is a sensitive topic by its nature. It was so easy to misinterpret the objectives of the program and be sceptical about its benefits. They knew that if they were not careful with communication, many of their people would be worried about losing their jobs or status in the organization. Therefore, they initially treated it as an evolution, not a revolutionary change. Once the pilot gained traction and proved its success, they were able to boldly communicate what enterprise agility meant for them. For instance, they initially did not require their employees to change their business titles on their business cards or LinkedIn. However, a few months into life with tribes, they

observed that people started internalizing the operating model and started changing their titles on LinkedIn to the likes of “tribe member,” “product owner,” or “chapter lead” quite naturally.

The second was ensuring that cultural transformation was a priority from the get-go. With the initial, or front-runner, tribe, they quickly understood that “doing agile” is quite different than “being agile.” They observed that it was relatively simple to do agile—from an organizational perspective they can change their employees’ operating rhythm with new processes and change their governance model fairly quickly. But being agile involves changing how people behave day in and day out, and it therefore takes much longer to achieve.

They started by identifying a few critical behaviours that they wanted all their people to exhibit, like showing ownership at all levels, being performance-oriented, and collaborating effectively beyond hierarchy. They then focused on making those behavioural changes in moments of truth. For each these behaviours, they defined where they are today and where they want to be in the future. Consequently, they launched an ongoing leadership development program and new training programs for their people to encourage them to model these behaviours and catalyse the change.

Reaping the Benefits of being an Agile Organization

The most immediate measurable benefit was simplification in their organization and governance. By reducing layers of management from seven to three, they significantly increased the number of “doers,” people who work on the front line. With cross-functional, end-to-end teams, they reduced handovers, created complete accountability, and improved time to market for launching new products from six to nine months to an unprecedented speed in the industry of four to six weeks. One of their tribes, for instance, had an idea for an insurance product for solar energy panels, and launched that product in the market four weeks later.

Another measurable benefit was happier employees. As tribe members internalized their new agile operating model, their engagement scores skyrocketed and now rank highest in the organization. They also reduced the number of their management committees, simplifying the way they govern their teams. Through all these leading metrics, they observed superior market performance and customer satisfaction in all lines of their business.

The improvements they have observed in their daily working environment are just as valuable as these measurable metrics. There is now extreme transparency on performance and resource allocation. Each squad has a performance dashboard that they review continuously. These dashboards then roll up at tribe and company levels. The CEO, at any given time was able to immediately see reasons for over- or under-performance and where they were spending their resources. This kind of transparency also gave them the opportunity to easily identify areas of the organization where they need to inject new talent.

With the level of close collaboration within and across their cross-functional teams, their agile operating model unleashed hidden talents and significantly increased their ability to innovate; all their tribes are continually coming up with breakthrough products and processes. And because their employees are happier and feel empowered to innovate, their transformation has also helped them with recruiting. By explaining their agile model to potential hires, they have been able to attract new talent from various industries and inject needed skills into their teams.

Effectively Adapting the Agile Principles to Work Remotely during the COVID-19 Outbreak

The teams at Allianz that have adopted agile principles were adapting extremely well to remote work during the COVID-19 outbreak. The handover of work from one team to another can be difficult, especially when team members were not co-located. But having members from multiple functional areas in one team naturally minimizes the need for such handovers. In addition, they have moved all agile ceremonies to a virtual environment. This ensured that their teams can continue their ceremonies, though modified, while working from their homes. They also introduced new social gatherings to maintain a sense of team and collaboration within tribes.

During these difficult times, as they were used to agility, the tribe members felt motivated with a purpose and completed achievable tasks from the team's backlog comfortably working from their homes.

Recommendations by Allianz CEO for other Leaders Considering Adopting Agility at Scale

Allianz former CEO, advises the leaders, to first build full conviction among their own leadership. Moving to an enterprise-wide agile organization is a multiyear journey that requires full motivation and sponsorship of the whole C-suite. It is also a delicate transition which often results in changes to the way an executive committee is structured. Therefore, managing leadership chemistry will be extremely important. Once on board, they need to collectively go through a leadership journey to learn and model behaviours that they want the whole organization to exhibit.

Secondly, she suggests not to go full scale from the get-go; rather, start small and strong. It may sound obvious, but organizations should approach agile transformations in an agile way. Have an end-state vision in mind from the very beginning, but get there gradually, learning from every agile team and continuously improving the design. Pick a front-runner tribe and set it up for success by selecting a strong tribe lead who already has the right mentality, designing a mission-oriented tribe, and operationalizing it with comprehensive training.

Thirdly, there is no one size of agile that fits all. Every organization goes through its own agile journey—but all require a cultural and leadership transformation as well as a mindset

change throughout the organization. Agile tools and methodologies are only the tip of the iceberg. There is much to learn, and people need to invest the time and energy to create their own journeys.

Organizations that start this journey should not conclude that the work is done once tribes are launched—that milestone is merely the beginning of the transformation. Agile transformation is not about moving boxes and lines. Driving agile maturity requires dedicated resources and a disciplined effort. To manage this need, they have set up an agile office under their HR department with a team of highly skilled agile coaches who are staffed across their tribes. The coaches' sole responsibility is to improve the agile way of working and drive agile maturity organization-wide.

Also, organizations that undergo agile transformation should dramatically increase their focus on transforming their people. An agile operating model requires new capabilities—such as a growth mindset, empowerment, and a performance orientation—that are generally secondary in traditional organizations. Building such capabilities with dedicated learning journeys for agile roles, and sometimes bringing in top talent from outside to fuel tribes, is essential in this new model.

Future Plans of Allianz Turkey

Through the transparency that agile transformation provided on performance and resource allocation, Allianz Turkey learned so much on not only what they can improve, but also on what they can become. They now wholeheartedly believe that they need to continue the journey that was started several years ago to become a truly digital insurance company. This was not an easy feat. It started with being completely customer oriented and addressing their needs in an increasingly simplified and digital way. It also required collecting and storing data in an effective way and having the capabilities to analyse data using advanced techniques, a transformation that they initiated in 2019. Finally, they try to remain humble about agile, knowing that there is always a way to go, and were working on improving their agile maturity and creating a talent pool that can thrive in this environment.

CONCLUSION

For the past two years, many business organizations can agree to the fact that the COVID-19 pandemic has been acting as a change catalyst and accelerated the pace of digital transformation. Not only the digital transformation, the business leaders also faced the harsh reality that under all the uncertain and disruptive situations, there was a need to improve the organization from within, to sustain the business. In order to react to the persistent changes, that arises as a result of the volatile, uncertain, complex and ambiguous (VUCA) conditions, there was a need for the businesses to become more agile.

It becomes essential for the organization to understand the difference between agile transformation and digital transformation and then choose the best type of transformation that they can operate their business, before they expose the new opportunities to deliver new efficiencies, and adopt the new business model of transformation.

Digital transformation happens when digital transformation is used the organization to change their manual processes with digital processes, so as to create modified business processes and to improve customer experience to meet the market requirements. With the advancement in the digital technology, when the older digital technology is replaced with the newer digital technology, this is called Digital Transformation.

However, when the entire organization is transformed into a well-designed environment based on Agile principles, that helps them to succeed in a collaborative, flexible, self-organizing and fast-changing environment, it is called Agile Transformation. To reap the benefits from the rewards of healthy agility, the agile principles have to be taught throughout the organization and develop teams according. It also becomes essential for the entire organization not only to change their mindset, but also to accept and adopt a culture of self-organization and collaboration. During the turbulent times, with the required support and resources, Agile transformation permits the organizations to be more reactive in response, so as to better serve their clients' interest with less efforts. An agile organization is designed for both, the dynamism and stability. Value-creating and value-protecting opportunities can be successfully achieved by adopting the agile operating model, which has the ability to quickly and efficiently reconfigure strategy, structure, processes, people and technology. An agile organization adds pace and adaptability to stability, thus creating a critical source of competitive advantage in volatile, uncertain, complex and ambiguous (VUCA) conditions

With the digital revolution that is transforming industries, economies and societies, many businesses are facing organizational challenges. Moreover, due COVID-19 pandemic, many governments across the world imposed travelling restriction. As a result, businesses to sustain in such turbulent times adapted the digital transformation, with the change in the work environment, like work remotely or work from home, the need to maintain healthy organizational culture, to maintain great communication with the employees and to engage and retain them is becoming more challenging.

Since the dawn of the digital age, technology has continued to move forward, but older innovations, such as laptops, and services, such as coding, are now cheaper and more readily available because they have turned into a commodity. Established businesses and industries are being commoditized or replaced through digitization, bioscience advancements, the innovative use of new models, and automation. With the increase in the volume, transparency and distribution of information, today the organizations need to adopt to the accelerating pace of digitization and democratization of information, so as to engage their stakeholders, in multidirectional communication and complex collaboration. Creative-based, knowledge-based and learning-based organizational tasks are becoming more important, as a result organizations need a distinctive value proposition to acquire and retain the best talent.

Agile organizations give consistency and emphasis on their value creation models, by setting a shared purpose and vision, across the organization, so that all their stakeholders feel personally and emotionally invested. Agile organizations focus on what their stakeholder wants and have a clear understanding of the ways in which they are going to create values for their stakeholders.

An agile organization encompasses a dense network of empowered teams that operate with high standards of alignment, accountability, expertise, transparency, and collaboration. However, to ensure smooth operations, the organization must provide a stable ecosystem for these teams. When a clear responsibility and authority is given to the teams, the team members will be highly engaged, will take care for each other, will try to come out with creative solutions to deliver the expected outcomes.

At the enterprise level, agile organization uses the rapid-cycle model to accelerate strategic thinking and execution. Instead of the traditional annual planning, budgeting and review, these organizations implement dynamic management systems like Objectives and Key Results (OKRs) and rolling 12-month budgets. At the team-level, the teams are empowered, so that they can focus on rapid iteration and experimentation, often in one- or two-week “sprints”. As a result of this empowerment, there is an increase in the sense of ownership, accountability and accomplishment within the team. In an agile organization, the leaders effectively empower employees to take ownership and they are motivated with confidence to drive the organization towards fulfilling its share purpose and vision. Cross-functional teams are formed by integrating the business development and technology employees, to design, build, implement and support the next-generation technology. To understand the customer needs and quickly provide solutions to them, these teams use crowd sourcing, hackathons and virtual collaboration spaces.

Allianz Turkey is one of the best examples of an agile organization. Allianz actively managed the adverse situation by adjusting their business mix, collaborating with their distribution partners, and further optimizing their risk model. Daily stand-up meetings, close collaboration among departments, full transparency on actions, and focused execution helped them to successfully navigate a difficult situation. They transformed their motor business organization into an agile ‘tribe’ and closely monitored the working model for six months, incorporating lessons learned as they designed the remaining tribes. Consequently, they designed and launched three additional product tribes plus a digital tribe and a central IT tribe. By reducing layers of management from seven to three, they significantly increased the number of “doers,” people who work on the front line. With cross-functional, end-to-end teams, they reduced handovers, created complete accountability, and improved time to market for launching new products from six to nine months.

The most immediate measurable benefit of agile transformation was the simplification in their organization and governance. The tribe members’ engagement scores skyrocketed and now rank highest in the organization. They also reduced the number of their management committees, simplifying the way they govern their teams. Through all these leading metrics,

they observed superior market performance and customer satisfaction in all lines of their business. their employees are happier and feel empowered to innovate, their transformation has also helped them with recruiting. The teams at Allianz that have adopted agile principles were adapting extremely well to remote work during the COVID-19 outbreak.

Organizations that undergo agile transformation should dramatically increase their focus on transforming their people. An agile operating model requires new capabilities—such as a growth mindset, empowerment, and a performance orientation—that are generally secondary in traditional organizations. Building such capabilities with dedicated learning journeys for agile roles, and sometimes bringing in top talent from outside to fuel tribes, is essential in this new model.

REFERENCES

- Batu Oncul et al (2020), How Allianz Turkey created an agile organization, <https://www.mckinsey.com/industries/financial-services/our-insights/how-allianz-turkey-created-an-agile-organization>
- David J. Teece (2016), Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy, *California Management Review*, 58(4), 13-35.
- McKinsey Agile Tribe (2017), “The 5 Trademarks of Agile Organizations”, December 2017. McKinsey.com.
- Karin Ahlback, Clemens Fahrbach, Monica Murarka, and Olli Salo, “McKinsey Global Survey Results: How to create an agile organization,” October 2017, McKinsey.com.

Post pandemic Business landscape: Recreating Sustainable Competitive Advantage in Higher Education

Taruna Maheshwari

Research Scholar, Ajeenkya D Y Patil University, Pune

Vani Kamath

Dean, D Y Patil Deemed to be University School of Management, Navi Mumbai

ABSTRACT

The pandemic has had a phenomenal impact on all the sectors of the economy. Education sector was not an exception to this. The disruption in the education sector in the post pandemic landscape has reached the new heights as most of the educational institutions around the world have closed and many have moved to online education. The unprecedented challenge for the higher education institutes is to recreate sustainable competitive advantage. The adoption of National Education Policy framework in higher education will enable the institutes to thrive for excellence. Apart from this it is also imperative for the institutes to identify the expectations of the students towards higher education institutes in the post pandemic landscape. This research article mainly tries to identify the factors that are crucial from the students' point of view in selection of the right institute. The research considers the data from the educational institutes of Mumbai and Navi Mumbai. The study is exploratory in nature. Around 100 students randomly from undergraduate colleges were contacted with the questionnaire. The responses were recorded and analyzed using the SPSS software. The data analysis revealed that the factors responsible for selection of the institute remained identical with the students as it was in the pre pandemic period. The study will be useful for the heads of all higher education institutes for framing the right strategies for sustainable competitive advantage.

Keywords: *Post pandemic, Business landscape, Sustainable competitive advantage, Higher Education, Factors influencing the selection of the right institute, Return on investment*

INTRODUCTION

Krishnadas Nanath, Ali Sajjad, Supriya Kaitheri (2021) summarized that the parameters used by the students in the pre pandemic period were totally different from that of post pandemic period. There were substantial changes in their selection criteria on four parameters. The cost, ranking, e-learning and student life. It was concluded in their study that cost of education was given a high priority, ranking of the institute was given less preference, E learning mode was highly preferred, and student life was given lesser preference. The study highlighted on the differences in priorities resulting from the pandemic.

Anamika Sharma and Irum Alvi (2021) mentioned in their research article that pandemic has led to the shift in the learning levels. The researchers studied the learners' perception in a higher education institutes in India during pandemic, before pandemic and post pandemic periods. The authors concluded that there is a statistically significant difference in the student's perception towards the pre pandemic and post pandemic learning methods, which indicated that students have a higher perception of the pre pandemic learning blended learning, than that of post pandemic web assisted learning.

Nadezda Rika (2016) studied the factors that affect the decision of secondary school leavers to join the higher education institute in Latvia. The author analysed the data of 644 responses using correlation and regression analysis. Four major groups of factors like Cultural, social, psychological and organisational were considered by the author for the study. It was concluded that the psychological and organisational factors are the best predictors of higher educational institutes.

OBJECTIVES OF THE STUDY

The major objective of the study is to identify the factors that are responsible for the sustenance of higher education institutes post COVID 19.

RESEARCH METHODOLOGY

The data was collected through the questionnaire from 100 students of higher education institutes of Mumbai and Navi Mumbai. The five point likert scale was used for all the identified factors. The data was analysed using SPSS software.

FACTORS CONSIDERED FOR THE STUDY

Specialization

The specializations offered by the school is a significant factor in deciding the right college for higher education. It varies from institute to institute. It was observed that the institute which offers new age specializations are always preferred by the students compared to that of the institute that offers traditional specializations. It was observed that in the engineering field, the specializations like artificial intelligence, machine learning, and data science are preferred more by the students over other traditional specializations. In the field of management, the courses like data analytics, supply chain management and strategic management have mushroomed more in all parts of the country.

Quality of the teaching faculties

Quality of the teaching faculty is dependent on the qualification of the faculties. Faculties with research orientation are preferred more by the students. The PhD qualification of the faculties gives the competitive edge to the higher education institutes.

Infrastructure

The facilities provided by the institute like library, lab, and modern facilities like air conditioned classrooms, Wi-fi enabled classrooms, ICT facilities are believed to give good college life to the students. Hence, it plays the major role in the selection of the right institute.

Fees

Fees charged by the institute is a major component and factor that is considered by the students. The value for money is looked upon by the students while selecting the right college for further education.

Return on Investment

The return on investment is calculated based on the fees charged by the institute. The gross salary which the student receives at the end of the 3/4/5 year program is always matched by the student with the fees which he or she pays during the duration of the program. Higher the gross salary, higher is the satisfaction of the student. Such colleges are more preferred by the students.

Duration of the program

Most of the undergraduate courses in India are for the duration of 3 to 4 years and post graduate courses for 2 years. The study tried to identify the relevance of this factor on the selection of the college.

International accreditations

The higher educational institutes generally enter into an agreement or MOU with the international universities for knowledge and research partnership. This leads to student exchange between the institutes. The institutes having such associations are considered as better institutes for the study as it leads to knowledge/ research sharing between the institutes.

Rankings

Government of India ranks the higher education institutes based on parameters like teaching learning, research, financial resource utilization and perception of the institute in the education field. The institutes which score higher grades on these parameters are considered as quality institutes by the students.

Program Curriculum

The HEIs are categorized as government funded institutes, private institutes and deemed to be universities. The selection of the institute is highly dependent on the curriculum with new age topics in the syllabus. The institute which changes the curriculum as per the new trends is always preferred by the students than the institute which follows the outdated curriculum.

Reputation

The total number of years of existence in the industry and the good governance and practices creates goodwill of the institute in the market. Hence reputation of the institute is dependent on its alma matter and the achievements of its alumni. Hence it becomes imperative for the institute to deliver quality to its students.

Student Teacher Ratio

It is believed that the teacher can pay attention to the students when the class size is minimum. The interaction is considered more fruitful when the student teacher ratio is minimum. Hence the regulatory bodies consider 1:15 as the ideal ratio. The institute which maintains this ratio is highly preferred by the students.

Admission Process

The tough and transparent admission process speaks a lot about the quality of the institute. Hence it becomes the deciding factor in the selection of the institute.

Employment perspectives

The placements and package offered by the recruiter plays a significant role in the selection of the institute. The visit of dream companies to the campus attracts more number of students to the institute.

Research

The National Educational policy has categorized the institutes into teaching and research institutes based on the quantum of teaching and research done by the institute. Hence the institute which offers both teaching and research is highly preferred by the students.

Location

The institutes located in metropolitan cities are considered to provide best facilities to the students. Hence, the institutes located in the center of the city and is easily accessible is preferred by the students for higher education.

DATA ANALYSIS

The Return on investment was considered as the dependent variable and rest of the factors like specialization (SP), quality of the teaching faculty (QT), Infrastructure (IF), fees (FE), Duration of the program (DU), International Accreditation (IA), Rankings (RK), Program Curriculum (PC), Reputation (RP), Student Teacher Ratio (ST), Admission Process (AP), Employment Perspectives (EP), Research (RS), and Location (LC) were considered as the independent variables for the study. The following were the findings of the study.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	1.000 ^a	1.000	1.000	.000	1.000	.	30	3	.
a. Predictors: (Constant), LC5, FE5, DU3, IA5, PC5, QT3, RK2, FE2, FE3, PC2, LC1, ST2, RP1, QT2, ST4, FE4, PC3, LC4, SP4, ST1, IF3, IA4, RP4, RP2, LC2, SP2, IF4, DU1, SP1, LC3									

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.971	30	1.166	.	. ^a
	Residual	.000	3	.000		
	Total	34.971	33			
a. Predictors: (Constant), LC5, FE5, DU3, IA5, PC5, QT3, RK2, FE2, FE3, PC2, LC1, ST2, RP1, QT2, ST4, FE4, PC3, LC4, SP4, ST1, IF3, IA4, RP4, RP2, LC2, SP2, IF4, DU1, SP1, LC3						
b. Dependent Variable: RI1						

As per the regression table, it can be interpreted that the coefficient is 1.000 suggested that there is a strong positive relationship between all the factors and the return on investment while $R^2 = 1.000$ which suggests that 100% of the variance in all the factors can be explained by return on investment.

The following table clearly explains the factors and rankings given by the students. The mean and the standard deviation is compared with all the factors and the ranking was given.

Factors	Rankings.	Mean	Standard Deviation
Specialization	1	4.22	1.253
Quality of the teaching faculty	1	4.10	1.130
Infrastructure	6	2.8	1.145
Fees	4	3.1	1.232
Return on investment	3	3.3	1.214
Duration of the program	11	2.18	1.150
International accreditations	8	2.50	1.120
Rankings	2	3.5	1.217
Program Curriculum	4	3.28	1.230
Reputation	5	3.0	1.156
Student Teacher Ratio	7	2.64	1.123
Admission Process	10	2.23	1.180
Employment perspectives	9	2.48	1.175
Research	11	2.02	1.151
Location	12	1.84	1.040

CONCLUSION

It can be concluded that more than 75 students out of 100 mentioned that quality of the teaching faculty and specialization matters more to them in selection of the higher education institute. Hence, it is given the 1st rank. Ranking and accreditations by the government is the next parameter for their consideration. Return on investment and fees are considered next in the race. It was also observed that post pandemic, fees is considered the major factor in deciding the right college. Reputation of the institute is preferred next followed by infrastructure of the college. Student teacher ratio was considered next in line followed by international accreditations. Employment perspectives, admission process, research, duration of the program and location of the institute are rated in the end by the students.

REFERENCES

- Krishnadas Nanath, Ali Sajjad, Supriya Kaitheri (2021), Decision making system for higher education university selection: comparison of priorities pre and post COVID-19, Researchgate.

https://www.researchgate.net/publication/349684110_Decision_making_system_for_higher_education_university_selection_comparison_of_priorities_pre-and_post-COVID-19

- Anamika Sharma and Irum Alvi (2021), Evaluating pre and post COVID-19 learning: An empirical study of learners' perception in higher education, Education and Information Technologies 26, 7015-7032. <https://link.springer.com/article/10.1007/s10639-021-10521-3>
- Nadezda Rika (2016), Factors affecting the choice of higher education institutes by potential students in Latvia, Conference: International Conference Innovations in Science and Education At: Prague, Czech Republic. https://www.researchgate.net/publication/301290314_FACTORS_AFFECTING_THE_CHOICE_OF_HIGHER_EDUCATION_INSTITUTIONS_BY_POTENTIAL_STUDENTS_IN_LATVIA

QUESTIONNAIRE

Dear respondent,

The present study is an endeavour to identify the factors affecting the selection of higher education institutes in Mumbai and Navi Mumbai. The statements related to the factors are listed below. Please express how far these practices and their outcomes are prevailing in your decision criteria by indicating your level of agreement/ disagreement on a five point scale

(Where SA= Strongly Agree, A=Agree, UD=Neutral, D= Disagree, SD=Strongly Disagree.)

The information provided by you will be used only for research and not for any commercial activity. Please spare a few minutes from your valuable schedule and share your true feelings. Confidentiality of the information provided will be ensured.

Name -----

Place of Residence:	a. Mumbai	b. Navi Mumbai	
Age:	a. 15-20	b. 21-25	
Gender:	a. Male	b. Female	c. Transgender

1. Specialization offered by the institute is one of the major factor considered for the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. Quality of teaching plays a major role in the selection of higher educational institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. Infrastructure of the institute is crucial in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. Fees charged by the higher education matters the most in the selection of the right institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. Return on investment is the major criteria while selecting the higher education institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. Duration of the program offered by the institute is one of the major factor considered for the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. International accreditations plays a major role in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. Ranking of the institute by the government organization is critical in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. The program curriculum of the institute is important in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

10. The reputation of the institute carries weightage in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

11. The student teacher ratio maintained by the institute becomes the deciding factor at the time of selection of the institute.

Strongly Agree Agree Neutral Disagree Strongly Disagree

12. The admission process followed by the institute is important at the time of selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

13. The placement offers provided by the institute carries weightage in the selection of the institute

Strongly Agree Agree Neutral Disagree Strongly Disagree

14. The Research initiatives and activities conducted by the institute becomes imperative for the selection of the institute.

Strongly Agree Agree Neutral Disagree Strongly Disagree

15. The location of the institute is the factor considered by me while selecting the right institute.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Challenges faced by higher education system and implications of National Education Policy on the teaching fraternity of Higher Education Institutes

Vani Kamath

Dean, D Y Patil Deemed to be University School of Management, Navi Mumbai

Taruna Maheshwari

Research Scholar, Ajeenkya D Y Patil University, Pune

ABSTRACT

The pandemic has bestowed India with a major shift in its policy initiative in the education sector. The National Education Policy has given a new direction, optimism and hope for the higher education institutes. The new normal has totally disrupted the entire education system of India through this policy initiative. To create a sustainable future landscape in the education industry, the higher education institutes need to adapt themselves quickly to this transformation. The current research paper mainly concentrates on understanding the adaptability of higher education institutes and the problems faced by them in transforming the entire system as per the New Education Policy. The study is exploratory in nature and uses the literature available on this topic. The data is collected from the teaching fraternity in Mumbai and Navi Mumbai. The findings of the study would guide the higher education institutions to institutionalize these dynamic capabilities and agile practices that they have employed during the new normal. The study assimilates the fact that the current problems of higher education system can be overcome through the implementation of the NEP.

Keywords: *National Education Policy, Higher Education Institutes, Issues and Challenges, Implementation, teaching fraternity*

INTRODUCTION

The NEP 2020 is the first education policy of the 21st century and replaces the thirty-four year old National Policy on Education (NPE), 1986. Built on the foundational pillars of Access, Equity, Quality, Affordability and Accountability, this policy is aligned to the 2030 Agenda for Sustainable Development and aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible, multidisciplinary, suited to 21st century needs and aimed at bringing out the unique capabilities of each student.

NEP 2020 aims to increase the Gross Enrolment Ratio in higher education including vocational education from 26.3% (2018) to 50% by 2035. 3.5 Crore new seats will be added to Higher education institutions.

LITERATURE REVIEW

Younis Ahmad Sheikh (2017) summarized that even though Indian higher education is the third largest in the world, there are enormous challenges in the system. The author identified that the system needs to be more transparent and it should be more accountable. India requires more of scientific research, skilled and highly educated people in the country. The challenges identified by the author are poor enrolment, gender equity, quality of education, infrastructure, political interference, faculty, accreditation, research and innovation and structure of higher education. The author also mentioned about the opportunities in the system like growth of higher education institutes, new age learning tools, opportunities for strategic engagement and capacity building and collaboration at the national and international level.

Dr Gouri Manik Manas (2020) identified the issues and challenges in the field of higher education. The author suggested the necessity of plans with all the stakeholders of the system like employers, youth, students, educational institutions, NGO's, parents and government. The challenges like Gross enrollment ratio, quality, infrastructure and facilities, financing, accountability and performance of the teachers, faculty, research and innovation were identified by the author.

Sahil Sharma and Purnendu Sharma (2015) summarized the challenges of higher education as gap between the supply and demand, lack of quality research work, shortage of faculty and high student faculty ratio and inadequate infrastructure and facilities. The author suggested various methods to overcome these challenges like implementation of innovative and transformational approach from primary and higher education level, industrial cooperation for the development of the curriculum, expert lectures, internships, live projects, improved quality, reputation and credibility, and collaboration with international institutes. These would uplift the current education system of India.

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1. To identify the problems of higher education institutes
2. To evaluate the problems faced by higher education institutes and
3. To assess the effectiveness of National Education Policy on Higher Education Institutes.

RESEARCH METHODOLOGY

The data was collected from 50 educationists from Mumbai and Navi Mumbai. Their opinions and views about the implementation of NEP is considered for the study. The questionnaire was developed based on the problems faced by the higher educational institutes. The faculty and the heads of the institutes were asked to identify the most critical factors related to their institute.

The Likert scale was used in the questionnaire. The opinion of the respondents was asked on the implementation of NEP.

RESEARCH DESIGN

The following variables were identified as the problem areas in higher education and were considered for analysis in the questionnaire.

1. Fragmented higher education
2. Development of cognitive skills
3. Learning outcome
4. Early specialization
5. Limited access in socio economic areas
6. Limited autonomy to teachers
7. Merit based career management and progression
8. Lesser emphasis on research
9. Research funding
10. Suboptimal governance
11. Ineffective regulatory system
12. Standards of undergraduate education

Finally, the last variable NEP implementation as a solution was considered for the analysis.

DATA ANALYSIS

The data analysis was done using SPSS software. The results of the same are given below:

Variable	Mean	Standard Deviation	Variance	Correlation
Fragmented higher education	2.79	1.481	2.194	1.0
Development of cognitive skills	2.78	1.481	2.194	.085
Learning outcome	2.60	1.342	1.800	.103
Early specialization	2.64	1.748	3.045	.065
Limited access in socio economic areas	2.60	1.353	1.832	.149
Merit based career management and progression	1.88	.719	.517	.179
Lesser emphasis on research	3.00	1.500	2.250	.359
Research funding	2.44	1.188	1.410	-.046
Suboptimal governance	1.86	.378	.143	.010
Ineffective regulatory system	2.09	.701	.491	.151
Standards of undergraduate education	2.80	1.643	2.700	.200

For the purpose of the research, factor analysis was done wherein each variable (considered as the grey areas of the higher education system) was compared with the NEP implementation as a solution. The research is the lacuna which was observed by the educationists.

On an average majority of the faculties mentioned that the major issue in today's education system is lesser emphasis on research with the mean of 3.00 followed by decreased standards of undergraduate education with a mean of 2.80. This needs to be addressed immediately by the higher education institutes. The research funding is the next issue that has to be resolved by the management of higher education.

The correlation between two variables fragmented higher education and implementation of NEP is very high hence there is a need for implementing the NEP in the higher education in India. There is a negative correlation between research funding and NEP implementation which indicates the perception of the faculties that NEP implementation will not accelerate the research funding in India. The least correlation was observed between the suboptimal governance and NEP implementation.

REGRESSION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.672 ^a	.452	.274	1.239		
a. Predictors: (Constant), low standards of undergraduate education, Early specialization, Fragmented higher education eco system, Development of cognitive skills, limited autonomy toteachers, limited access in socio economic areas, merit based career management and progression, suboptimal governance, Learning outcomes, lesser emphasis on research, research funding, ineffective regulatory system						
ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.799	12	3.900	2.540	.015 ^a
	Residual	56.821	37	1.536		
	Total	103.620	49			
As per the regression table, it can be interpreted that the coefficient is .672 suggested that there is a strong positive relationship between all the problems faced by higher education institutes and the implementation of NEP as a solution while $R^2 = .452$ which suggests that 45% of the variance in all the factors can be explained by NEP implementation as a solution. This is the table that shows the output of the ANOVA analysis and whether there is a statistically significant difference between the group means. The significance value is 0.015 (i.e., $p = .015$), which is below 0.05. and, therefore, there is a statistically significant difference in the mean length of variables identified as the grey areas of higher education system and the NEP implementation.						

CONCLUSION

It can be concluded that it is imperative for the educational institutes to implement the National Education policy in the system for the overall growth of the education sector. The challenges and the problems faced by the higher education institutions are diverse and abundant. But implementation of NEP 2020 is the way out for the progress of higher education. The research highlights the fact that the perception of the educationists towards this policy is positive and hence there is a vast scope for the institutes to implement the suggestions in the system. Low standards of undergraduate education can be overcome by training the staff and improving the facilities of the institute. The problem of early specialization can be resolved by introducing them in the later years of the curriculum. Fragmented higher education eco system can be made more dynamic through the continuous evaluation pattern, Cognitive skills can be enhanced through more of aptitude tests and training and development cell, autonomy to teachers can be given teaching beyond the classroom, limited access in socio economic areas can be improved through new age technologies, merit based career management and progression, optimal governance, Learning outcomes, More emphasis on research, research funding and effective regulatory system would pave the way for the progress and growth of higher education system.

REFERENCES

- Younis Ahmad Sheikh (2017), Higher Education in India: Challenges and Opportunities, Journal of Education and Practice, ISSN 2222-1735, Vol.8, No.1. <https://files.eric.ed.gov/fulltext/EJ1131773.pdf>
- Dr Gouri Manik Manas (2020), Issues and challenges in higher education in India, International Journal of Research in Economics and Social Science, Vol 10, Issue 6, ISSN: 2249-7382. https://www.researchgate.net/publication/344789220_ISSUES_AND_CHALLENGES_IN_HIGHER_EDUCATION_IN_INDIA
- Sahil Sharma and Purnendu Sharma (2015), Indian Higher Education System: Challenges and Suggestions, Electronic Journal of Inclusive Education, Vol 3, No.4. <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1179&context=ejie>

Does Crypto currency have the potential to replace Fiat money?

Vinita Fernandes

Asst. Professor, St. Andrews College of Arts, Science and Commerce, Mumbai

ABSTRACT

Crypto currency appears to have addressed many of the flaws of fiat money. But not everyone is sold on this new form of currency as traditional methods of payment continue to be preferred by people who are reluctant to take risks. The expansion of cryptocurrency continues, and doubts regarding its position in the monetary world have begun to surface. As a result, the purpose of this research is to determine how knowledgeable individuals are about cryptocurrencies and if they have the potential to replace fiat currency in the future. The study focuses on India and employs secondary data as well as primary data to examine the country's interaction with cryptocurrencies. It is impossible to predict the future, hence this paper serves as a speculation rather than an accurate prediction

INTRODUCTION

When we think about currency, the most commonly associated visual of it is fiat money, which is government issued currency such as the dollar or rupee. However, money has been portrayed in numerous ways throughout history. Direct trading for goods and services was prevalent prior to the invention of money. This practice is now known as barter and is regarded as the foundation of our modern economy. Gradually, this gave rise to the trade of everyday objects such as shells, barley, weapons, and food etc. for products. These objects, however, were indivisible, making it difficult to gauge the worth of commodities. Metal money, in the form of coins made from precious metals such as bronze, copper and then silver and gold were thus introduced. Given its intrinsic value, it simplified trading. However, it was difficult to transport around large quantities of coins and it was also vulnerable to fraud by mixing cheaper metals into the mix for a coin. The first form of paper money was found to be created in China. Unlike coins, this paper was based on trust rather than an intrinsic value. This concept extended across the world, boosting the usage of paper money. Eventually, the value of money was linked to the value of gold when the Bretton Woods system established the U.S. dollar as an international reserve currency backed by gold at a fixed value of \$35 per ounce. However, it proved difficult for the US to keep the gold rate stable and the system collapsed. Since then, fiat money since has no intrinsic value and is entirely based on trust in central authorities. Various developments have been made in the field of finance over the years, the most popular and intriguing of which appears to be cryptocurrency. Despite the controversy, it appears to be soaring to impressive heights. A

cryptocurrency is best defined as a digital medium of exchange. In contrast to fiat currencies, cryptocurrencies are decentralized which means that they are not under the regulation of any central authority. Instead, transactions are verified and recorded on a blockchain. This eliminates the requirement for a third-party validator, such as a bank, to exchange money between people. International transactions are likewise permitted without the need for prior approval from any authority. Traders profit from lower transaction costs due to the absence of an intermediary. Cryptocurrency appears to have addressed many of the flaws of fiat money. But not everyone is sold on this new form of currency as traditional methods of payment continue to be preferred by people who are reluctant to take risks. The expansion of cryptocurrency continues, and doubts regarding its position in the monetary world have begun to surface. As a result, the purpose of this research is to determine how knowledgeable individuals are about cryptocurrencies and if they have the potential to replace fiat currency in the future. The study focuses on India and employs primary data to examine the general population's interaction with cryptocurrencies.

LITERATURE REVIEW

Oona Kuikka (2019), The author's focus is on the advancements in cryptocurrency and its potential to become a worldwide currency. The research was conducted using secondary data sources, it provides a thorough analysis of the features, merits, and drawbacks of cryptocurrency.

Balcilar, et al. (2017), The volatility of cryptocurrencies, particularly Bitcoin, was the first factor this paper took into account. Its volatility has pro-cyclical tendencies, meaning it rises as economic activity rises. The link between the volume of bitcoin and its volatility and returns was investigated in an empirical research and the study's findings indicated that there was no strong correlation between the volume of bitcoin and its volatility.

Poyser's (2017) studies, there are three main factors that affect the value of cryptocurrencies. Supply and demand, market developments and speculative activity, as well as the legalization and adoption of cryptocurrency. The widespread online awareness and popularity of Bitcoin is one of the explanations cited for its rapid increase in value.

Kristoufek (2013), there is a positive relationship between the value of Bitcoin and the volume of Google searches for it. The value of cryptocurrencies according to the author, is influenced by a number of factors including speculation, popularity, media attention, the regulatory environment, price manipulation, and shifts in public perception.

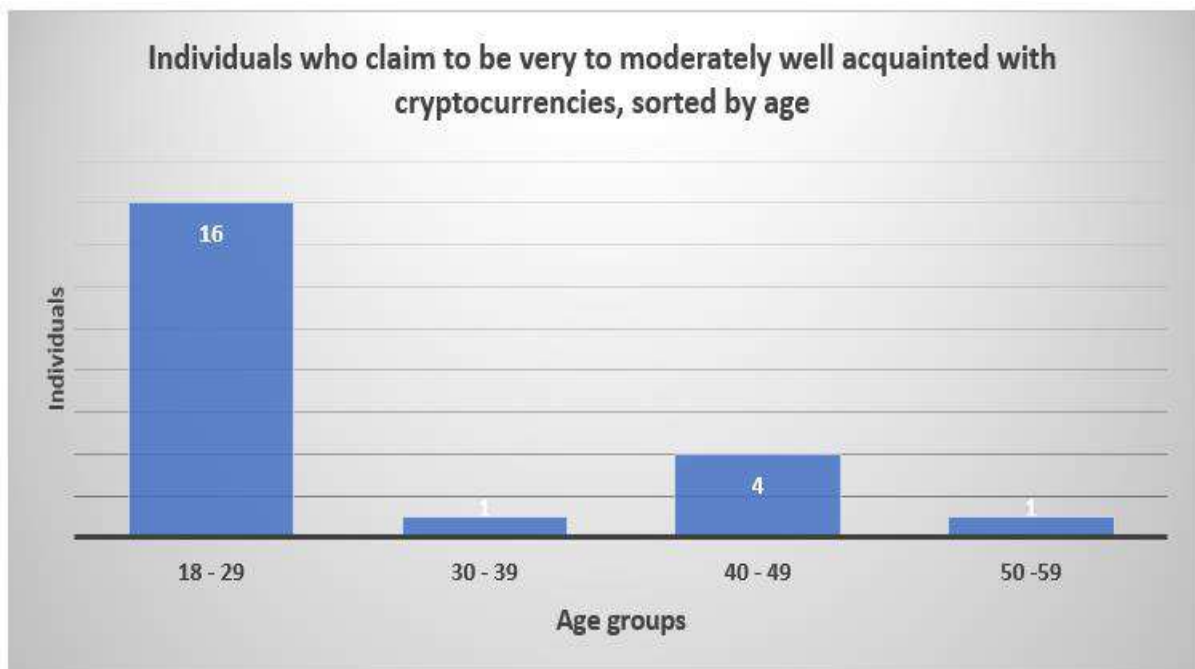
Auer et al., (2018), Regulations have been identified as one of the factors influencing both the value and transaction volume of the currency. However, because it is still in its early stages of growth, the author notes that there is yet to be a worldwide consensus on how to tackle the issue in a regulated manner, particularly taxes, which is one of the most pressing challenges. If there is no clear consensus on how to apply taxes on cryptocurrencies, it will be impossible for it to compete on a global scale.

THE RESEARCH OBJECTIVES

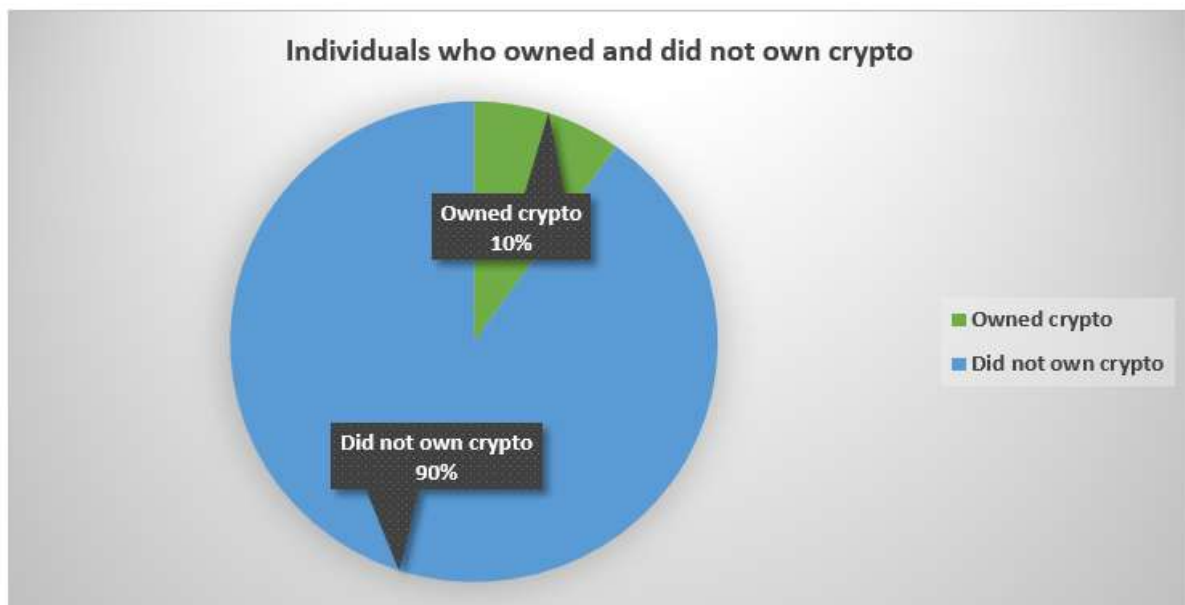
- To study the amount of understanding people have about cryptocurrencies.
- To determine whether they have the capacity to replace fiat currencies in India.

METHODOLOGY

The study was carried out by an anonymous voluntary survey. The overall population sample consisted of 111 people. The survey was conducted using Google Forms. The data was analysed and processed quantitatively using the Google Forms tool.



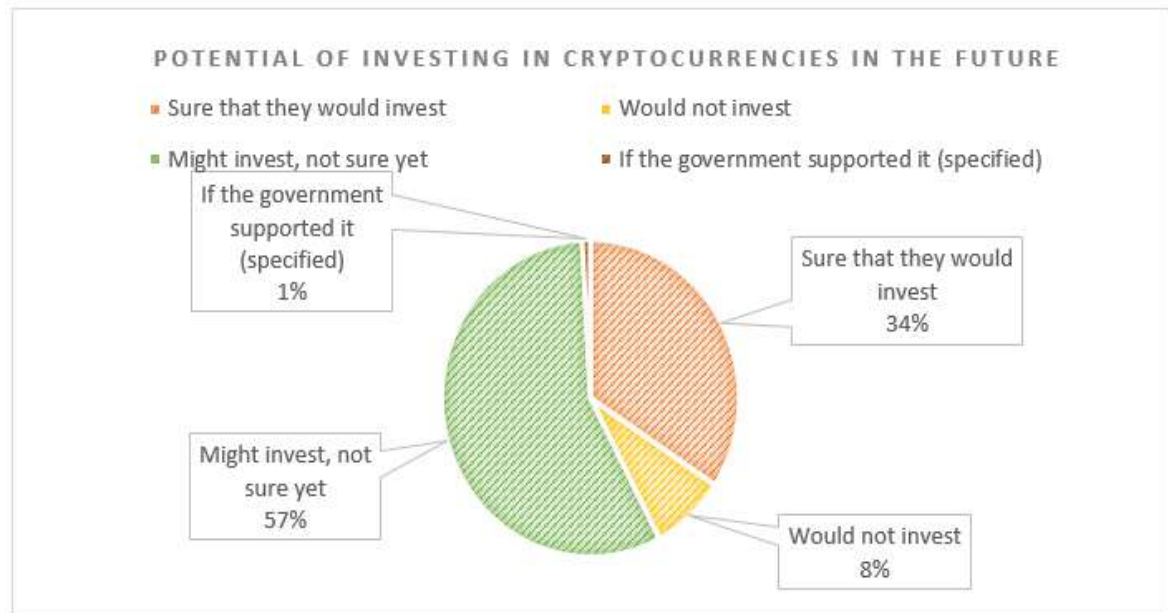
With 13 individuals, men appear to be the most familiar with crypto. 9 of these 22 consisted of women. When it comes to particular cryptocurrencies, Bitcoin seems to be the most well-known according to 108 participants. Ethereum is the second most known (49) followed by Tether (26), Litecoin (20) and Binance Coin (22). Lesser-known ones included dogecoin (7), polygon (2), cardano (2), solana (1) and ripple (1). Only 11 (9.9%) of those surveyed claimed to own any kind of cryptocurrency whereas the vast majority of 100 (90.1%) did not.



Out of the 11 who held cryptocurrency, 7 identified as male while 4 were female. Cryptocurrency was found to be primarily held by people in the age group of 18-29 as per 8 individuals. 2 persons were in the age groups of 40-49 while 1 person was in the age group of 50-59. Participants who answered "no" were given a selection of choices to choose from to explain why they did not invest in cryptocurrencies. The most commonly given reason (50) was a difficulty in understanding. According to 41 selections, another reason for scepticism is that it is still not accepted as a valid form of payment for everyday items. 38 respondents believe it is too risky to invest in, while 36 are concerned about the market's lack of regulation. 20 people linked cryptocurrency's rise to a bubble, while 3 termed it a scam. 15 on the other hand were simply disinterested, while 12 were preoccupied with other financial priorities. When questioned what would persuade them to invest in cryptocurrencies, 63 said they would do so if they understood the concept, while 56 said they would do so if they knew how to invest in it. 52 people said they would feel more secure if the government to be more supportive and 30 said they would if they could use it to buy everyday items or to pay bills. Nothing, according to 7 respondents, would entice them to invest in cryptocurrencies. In terms of what aspects of crypto appeal to them the most, 'decentralization', 'non-inflationary currency' and 'anonymity' received 31 picks each. The majority of votes, that is 44, were given to 'transaction transparency'. 39 were impressed by the 24-hour availability while 33 said the low transaction costs appealed to them. When asked whether they planned to invest in it in the future, 38 (34.2%) were sure that they would. The majority of 24 of the 38 who were certain to invest in the future were between the ages of 18 and 29, confirming that the younger generation is more likely to find cryptocurrencies attractive and a feasible form of investment. 9 (8.1%) were opposed to investing in it. The major reasons cited by these 9 respondents for not investing were simply disinterest and the risk associated with cryptocurrencies. Nothing, as per the majority of 5 would encourage them to invest in cryptocurrency even in the future. The majority of

respondents, 63 (56.8%) respondents said they might invest in it and weren't very sure yet. One person (0.9%) specified that they would if the government supported it.

The closing question asked their opinion on if cryptocurrency had the potential to replace fiat currencies in the future. 48 (43.2%) claimed that it wouldn't. 46 (41.4%) said that it might while 16 (14.4%) were optimistic and said yes. 1 person (0.9%) specified that they did not see it happening in the near future



DISCUSSION

The data indicates that most people are aware about cryptocurrencies but generally have a very limited grasp of them. While they are aware of its existence and benefits, they find it hard to comprehend its mechanisms. Most people have no idea how to get started to begin with. People appear to be exposed to the idea of it on a surface level through media and other sources. Cryptocurrencies frequently make headlines for their regulatory and legality aspects, but the underlying technology is rarely discussed. The shortage of information makes it unappealing to people since they do not want to invest in a technology about which they know nothing. Younger people appear to be more familiar with crypto than older age groups, presumably due to the buzz around new technologies. Older people may be more comfortable with long-established investing methods and have little desire to learn about newer types of investment. Men appear to be more knowledgeable about cryptocurrency than women. Bitcoin appears to be the currency with the most recognition, which is not surprising given that it pioneered the cryptocurrency market. The altcoins do not perform as well in terms of familiarity, with less than half of the respondents reporting knowledge of these coins. Despite the fact that altcoins were created to address Bitcoin's limitations, Bitcoin still seems to be leading in terms of familiarity at least with the general Indian population. Although people are familiar with the term, it appears that only a small

percentage of people invest in cryptocurrency. The majority of cryptocurrency owners are male. The reasons behind it could be that studies show that men tend to take more risks than women, and that sectors related to tech and finance are dominated by men. Our research supports the prevalent impression that cryptocurrency is more often invested in by younger people. Younger individuals have more exposure to technology and seem to adapt to changes quicker. They are more likely to pick up the workings of a new tech faster than older generations. Social media is another factor which has aided the expansion of crypto and even the development of many altcoins. Thus younger generations are more familiar with cryptocurrency. People's confusion and difficulties with cryptocurrency is quite typical of any emerging technology. People will not invest in anything about which they are unsure. People would rather not take the effort to figure out how to invest in crypto since it requires learning. Although some businesses are considering accepting cryptocurrency as payment, few goods and services can be purchased with it. Furthermore, paying for products with cryptocurrency such as Bitcoin is not a good idea since price volatility may cause the coin to be worth later than what you owned it at. People would be more likely to purchase cryptocurrency if it was more widespread and accepted in more locations. Another reason why individuals are averse to buying cryptocurrencies is because of the risk associated with it. It isn't intrinsically valuable, hence its value is based on supply and demand. Crypto gains value if the demand for it is greater than its supply and decreases in value if the supply is greater than the demand. When more people sell, the price falls, and when more people buy, the price rises. As a result, variables such as celebrity, media, government regulations, events, and so on may impact people's views and, as a result, the supply and demand for a coin. While the unregulated crypto market is one of its key selling points, it does not appeal to everyone. Some individuals regard cryptocurrencies as a bubble or a hoax, expecting a plunge in value. According to our study, these are the factors that discourage individuals from acquiring cryptocurrencies. One of the most compelling reasons for investors to invest in cryptocurrency was transaction transparency. Transactions on the Bitcoin network, for example, are public, traceable, and permanently stored. Because its ledger is decentralised, each participant receive a blockchain copy. The transactions saved contain information such as the amount, time, wallet from which the money was transferred, and wallet that received the money. Every transaction that occurs in Bitcoin is visible to everyone on the network. Along with being transparent, it also offers anonymity. It does not require participants to be linked to their actual identities and instead uses randomised letters and numbers. The fact that it was open 24 hours a day, seven days a week was the second most enticing feature. Decentralization, non-inflationary characteristics, anonymity, and low transaction costs all seemed to appeal to people in the same proportion. Investors claimed to like these features, although not as much as the transparency and 24-hour availability. Most individuals could not say for sure whether or not they would invest in cryptocurrency. While the benefits drew them in, there still appears to be some uncertainty due to a lack of knowledge. While they will need some time to adjust to this new kind of currency, they aren't completely convinced just yet. A little less than half of the population answered they would definitely invest, indicating that there are a few individuals that are ready to take the risk and believe the benefits exceed the risks. The younger generation seems to be more confident in investing in cryptocurrency than the older generations. Only a small percentage of the

population was entirely opposed to it, indicating that its features did not impress them. They were either uninterested or believed it was too risky to invest in. Nothing appeared to pique their interest in making an investment. People seem to be unsure as well if cryptocurrencies would replace fiat currencies in the future. Almost half said they were certain it wouldn't happen, while the other half said they could see it occurring but weren't convinced. Only a small percentage of the population believed it would succeed in replacing fiat. This demonstrates that cryptocurrencies have an extremely small chance of replacing fiat money. Coexistence is more likely.

The number of individuals utilising cryptocurrencies will undoubtedly increase in the future, but fiat currency will not be displaced and will continue to be the preferred method of payment. Cryptocurrencies require a stable internet connection and electricity to function; without them, real-world transactions would be impossible.

Indians also appear to prefer holding cash physically or prefer investing in gold and other goods. Fiat would be favoured since you can pay for things without requiring internet or a mobile device. Credit cards, debit cards, and now even peer-to-peer systems like GPay, Paytm, and WhatsApp have all gained popularity in recent years. These types of money are more handy for people who do not wish to carry cash. Given cryptocurrencies high volatility, it would not work well for everyday transactions. For example, Laszlo Hanyecz purchased two pizzas for 10,000 Bitcoin in the first crypto transaction for commodities. At the time, those two pizzas cost \$41. 10,000 bitcoins would be worth millions at today's prices. It therefore cannot replace fiat as a currency to buy everyday products since you would face a loss if the coins you provided to someone increased in value in the future. It's also worth noting that cryptocurrencies provide total decentralisation. No government would allow anything like that to happen on a broader scale. They would not be willing to relinquish their financial power. It is also important for governments to have control over monetary systems to prevent hazards such as a recession or to control inflation. People cannot be responsible enough to manage their own money; thus, they require a financial institution to function as a safety net for their savings. If you make a mistake with a cryptocurrency transaction, your funds are gone forever. On the other hand, banks can assist you in recovering fraudulent transactions. Finally, there is still a lot of misunderstanding regarding cryptocurrencies that discourages people from using them. People are comfortable with traditional systems of money, and while progress is being made in spreading awareness about crypto, it will take years to persuade people to abandon fiat money systems. This research contains limitations such as time limits and regional restrictions. The 111 participants' replies should not be extrapolated to the entire population. The study was strongly responded to by those between the ages of 18 and 29, as well as by women, which does not reflect an equal number of replies in terms of demographics. Regulations and legislations governing cryptocurrency are continually evolving, and they will play a significant role in its development.

CONCLUSION

Given the above discussion, we may infer cryptocurrencies have a very low possibility of replacing fiat money in the foreseeable future. There is however a possibility of it coexisting. Institutions like banks will adapt and improve in order to meet the rising popularity of cryptocurrency. Some nations, notably India, are already considering creating their own cryptocurrency. Finance Minister Nirmala Sitharaman stated in her announcement of the Union Budget for 2022-23 on February 1, 2022, that India is on track to establish its own centralised digital currency in the fiscal year 2022-23. In addition, Sitharaman stated that India's new digital currency will be backed by the Reserve Bank of India (RBI). In the US, the Federal Reserve published a white paper in January 2022 on the possibility of introducing a Central Bank Digital Currency to complement existing payment systems. China is currently testing its own CBDC and is expected to be the first large economy to implement an official CBDC. Only public awareness can help cryptocurrencies gain traction. It is necessary to take steps to educate the general public about its benefits. People should be informed about this alternative investing option, which should be portrayed as a choice between the two rather than a competition. People still find it difficult to grasp how to invest in cryptocurrencies, thus steps should be done to educate them on how to get started. To appeal to the general audience, interfaces must be streamlined and made user friendly. The only thing that will drive broad acceptance is education on digital currency. Fiat will continue to exist till then.

REFERENCES

- Ashford, K., & Schmidt, J. (2022, January 25). What Is Cryptocurrency? – Forbes Advisor. Forbes. Retrieved March 20, 2022.
- Cabrera, N. (2020, July 9). A Brief History of Cryptocurrency as Payment. Bakkt. Retrieved March 25, 2022.
- Cryptocurrency trading: a comprehensive survey. (2022, February 7).
- Kuikka, O. (2019, April 19). Can cryptocurrency come to fulfil the functions of money? An evaluation of cryptocurrency as a global currency.
- Sanyal, S. (2022, February 2). Digital Rupee: India's Own Crypto that will Go Against Bitcoin. Analytics Insight. Retrieved May 1, 2022.
- <https://www.analyticsinsight.net/digital-rupee-indias-own-crypto-that-will-go-against-bitcoin/>
- <https://bitcoin.org/en/protect-your-privacy>
- https://www.theseus.fi/bitstream/handle/10024/170337/Kuikka_Oona.pdf?sequence=2&isAllowed
- <https://jfin-swufe.springeropen.com/articles/10.1186/s40854-021-00321->
- <https://www.bakkt.com/blog/consumer/a-brief-history-of-cryptocurrency-as-payment>
- <https://www.forbes.com/advisor/investing/cryptocurrency/what-is-cryptocurrency/>

The Combined Impact of COVID-19 and BS VI Regulation on the Two Wheeler Automobile Sales in India

Harpreet Singh

Research Scholar, IILM University, Gurgaon

ABSTRACT

The paper examines the impact on the two wheeler automobile sales on account of the COVID-19 due to various import and export restrictions imposed by the government both at centre and state level, impact of the lockdown imposed , The price increase due to BSVI regulation imposed by the government. The impact of the COVID-19 on the Indian economy was in tune of 15 to 33 % Gross domestic product and the gross domestic product shrank by 7.3% in 2020 -2021 period. It was observed that the industrial production reduced by 9.6% due to prevalent COVID-19 wave1 and 2. The aim of the secondary research work was to examine the impact of COVID-19 on the two wheeler automobile sector which contributes 7 % of gross domestic product of manufacturing, contributes 27% of the overall industrial gross domestic product and offers 2% revenue contribution in the GST. The current two wheeler population in India is estimated to be 190 million. the new regulation of BS VI introduced by the government increased the prices steeply resulting in double whammy for the consumers on one point they were reeling under COVID-19 restrictions and reduced compensation or salaries and on the other hand that two wheeler had become hard to reach due to steep price increase .The research methodology adopted includes reviews and analysis of various articles published in journals of repute, annual business reports, newspaper articles and reports and various online literature and web sources. The government in order to revive the two wheeler economy and sales of two wheeler must look at subsidising the prices of few essential commodities where by the cost of the two wheeler can be reduced and also special financial packages at low interest must be provided so that people with limited financial resources can again look forward to owning a two wheeler for their commuting needs.

Keywords: *Two Wheeler Sales, BS VI regulation, Automobile, Product Price, Lockdown, Gross domestic Product, COVID-19*

INTRODUCTION

COVID-19 impacted many countries including India resulting in widespread job losses due to lockdowns in major cities. The travel restrictions across globe severely affected the travel, manufacturing, airlines and the hospitality industries. The Indian Aviation Centre (CAPA) reported that, during April 2020, aviation industry suffered losses of USD 3.6 billion (FICCI Report, 2020) The manufacturing, travel and airlines industry which had round the clock working and employed many people in shifts had a big impact of the on automobile sales in

India especially two wheelers as they are economical to maintain and affordable in comparison to a four wheeler automobile. The Impact on the India's GDP is projected to have constricted by 8.0 % in real terms in 2020-21, which implies our overall economic loss of Inr. 11.6 Trillion (Dr. Poonam, September, 2021). The projected unemployment rate in urban areas of Indian cities rose to 20.9% during the first quarter of 2020 (April-June period) which was twice the unemployment rate in the first quarter of 2019 (8.9%) The impact was not just of sales of the vehicles but also on the availability of the raw material due to Covid import and export restrictions the supply of the parts especially from China was affected resulting in increase of input cost of the vehicles production including two wheelers which resulted in the price increase of the end product.

To top it all Indian government introduced the BS VI regulations for all the automobile in India. The two wheeler industry had a big impact as they had to migrate from the carburettor build systems to Fuel injector systems increasing in the input cost and thereby increasing the on road price for consumers. The four wheelers e.g. cars were already using fuel injector technology and hence they just needed to address the emissions norms in order to meet the BS VI regulation.

LITERATURE REVIEW

The Hindu, (March 2022) reported that the pandemic had a deep routed effect on the livelihoods to people including people staying in vulnerable sections of society. And, suggested that a long term and focussed response is needed from the central and state governments in order to allow the households effected by COVID-19 to emerge from the crisis. Sona Mitra,(October 2021) the job losses during COVID-19 have been more for the women than men, and it has been observed that the traditionally women employment in sectors such as hospitality, tourism, beauty and wellness is more and these segments were hard hit during the COVID-19.

Dig Vijay S. Pawar et al. (2020) had examined the effect of the COVID-19 on commuters travel mode preference and impact of the socio –economic behaviour on the choice of travel mode selected. It was observed that the 41.65% of the commuters stopped their traveling during transition to lockdown, and 51.31% reported same mode usage as before. Very few commuters actually shifted from the public to private mode (5.3%). The travel time was observed to be the most significant element considered by commuters during their travel mode choice related to work.

The research conducted by CMIE showed that the incomes of the households fell by 9.2% in March 2020 and by 27.9 % in April 2020 (average figures) as a consequence of the first wave lockdown. Anand and Thampi (2021) found that the wages declined by 7.6% in April-June 2020. Although it was observed that employment opportunity improved but the wages reduced and also the people were ready to compromise on a lower package in order to sustain themselves and their families so that they can have resources and funds ready in case of another COVID-19 wave. As per the report published by TOI, 2021 it had reference of the

study conducted by the Azim Premji university as per which 23 crore people were pushed below poverty line during the first wave of COVID-19 (Anoop Satpathy committee recommended a national minimum wage threshold of Rs. 375.00 per day). The study also mentioned that poverty in rural areas increased by 15% and in urban areas it increased by 20% during the COVID-19. CEO Mahesh Vyas (Centre for Monitoring Indian Economy, June 2021) had mentioned that over 1 crore people lost their jobs during the second wave of coronavirus. He also said that 97 per cent of households' incomes have declined since the beginning of the pandemic last year.

BS VI emission norms came into from 1 April, 2020, and it closed all the legal sales and registration of BS 4 vehicles in the country. These norms were stricter than the previous norms applicable in India and it required major changes in the engine technology of the automobiles. The change in the technology resulted in the higher cost of the parts and equipment resulting in increase in the price of the automobiles.

OBJECTIVE OF STUDY

to examine the impact of the COVID-19 on the sales of the two wheeler automobile industry, also to explore the impact on the sales of two wheeler automobile due to the change in regulation from BS IV to BS VI.

METHODOLOGY OF STUDY

The main aim of the paper is to study the effect of the COVID-19 and BS VI regulations on the two wheeler industry. The research methodology adopted includes reviews and analysis of various articles published in journals of repute, annual business reports, newspaper articles and reports and various online literature and web sources.

LIMITATION OF THE STUDY

During the course of study you tend to come across certain limitations, which turn up as stepping stones for further studies. Our present study posed certain limitations such as: only secondary data source were considered for the measurement of the impact of the COVID-19 and BS VI on the two wheeler automobile industry. The researchers in near future can deliberate the use of primary data and can also consider other sectors related to service industry, telecom, Consumer durables, retail industry, finance and banking industry, agriculture and IT Industry.

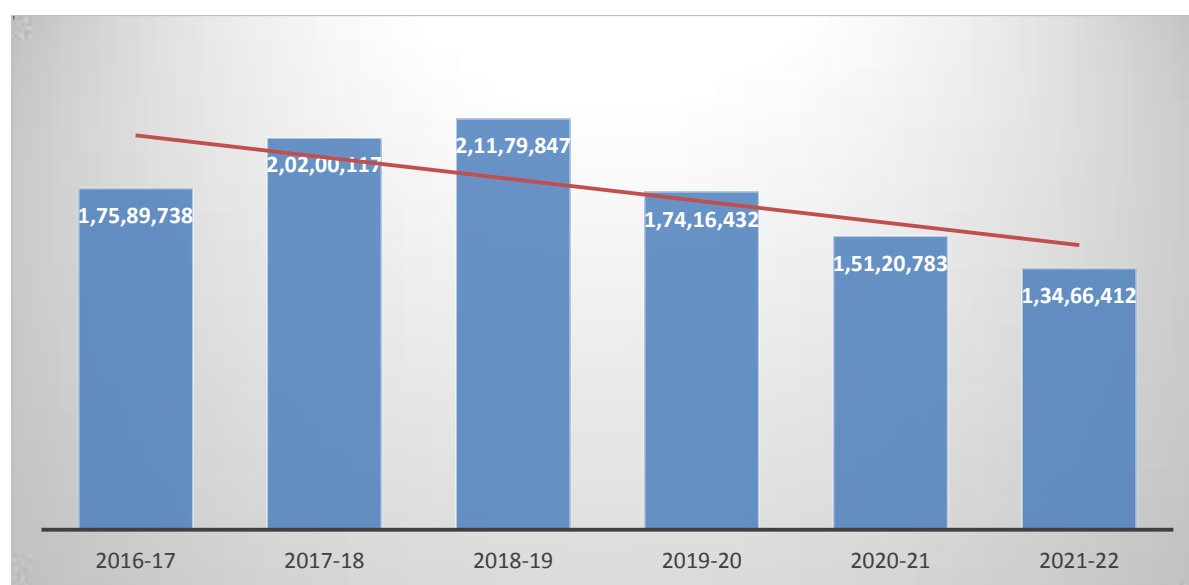
RESULT AND ANALYSIS

COVID-19 Impact on Two Wheeler Industry and Sales

Table 1: SIAM figures of Dispatch of Two wheelers from 2016 to 2022

Category	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Two Wheelers	17589738	20200117	21179847	17416432	15120783	13466412

Figure 1: Graph showing dispatch Trends in Two wheeler industry, source: Siam



The above table and graph clearly shows a decline in the two wheeler dispatch volumes in Indian market the effect of COVID-19 can be clearly seen in the 2020-21 and 2021-22 figures. The decline in the two wheeler industry by 4123326 units in FY22, the decline is 23% and Indian two wheeler industry which produces more than 60% of the commuting vehicles on which the livelihood of many people depends, the decline in the sales represent that the buyers in the market are not there. The issue could be because of the COVID-19 protocols, loss in jobs and funding issues.

Table 2:

Sales comparison of Major Two Wheelers in India CY 20 vs. CY 19, source: Auto Panditz

Ran k	OEM	CY2020	CY2019	YoY	MS 2020	MS 2019	YoY
1	Hero MotoCorp	53,88,331	66,70,388	-19.20%	37.80%	35.90%	1.80%
2	Honda Motorcycle & Scooter	35,79,557	48,03,053	-25.50%	25.10%	25.90%	-0.80%
3	TVS Motor Company	19,88,458	26,93,963	-26.20%	13.90%	14.50%	-0.60%
4	Bajaj Auto	17,23,391	22,85,358	-24.60%	12.10%	12.30%	-0.2%
5	Royal Enfield	5,38,889	6,90,913	22.00%	3.80%	3.70%	0.10%
6	Yamaha Motor	5,04,602	6,34,759	20.50%	3.50%	3.40%	0.10%
7	Suzuki Motorcycle	4,93,307	7,15,712	31.10%	3.50%	3.90%	-0.40%
8	Piaggio	47,172	67,965	-30.60%	0.30%	0.40%	0.00%
9	Kawasaki Motors	1,237	3,305	-62.60%	0.00%	0.00%	0.00%
10	Harley Davidson	1,037	2,495	-58.40%	0.00%	0.00%	0.00%
11	Triumph Motorcycle	700	623	12.40%	0.00%	0.00%	0.00%
12	Mahindra Two Wheelers	365	1,573	-76.80%	0.00%	0.00%	0.00%
TOTAL		1,42,67,046	1,85,70,107	-23.20%			

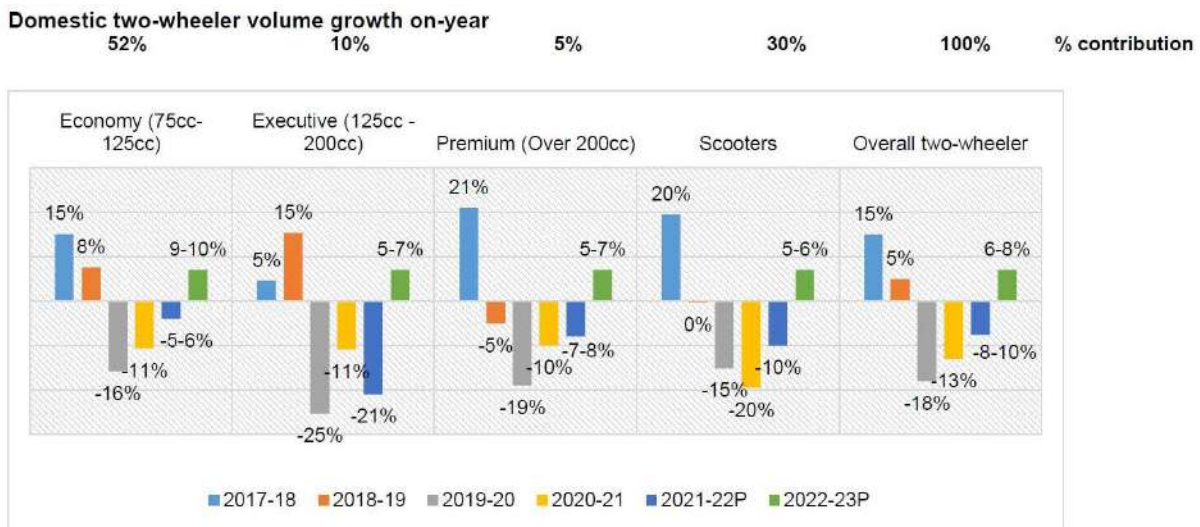
The above table analysis reflects the following based on the comparison of non Covid period (CY 19) with COVID-19 Period (CY 20):

The two wheeler industry declined by 23% .The leader of two wheeler industry Hero MotoCorp sales declined by 19.2%, but was able to increase its market share by 1.8%. Honda which was the number two player in the Indian two wheeler industry recorded a decline of 25.5% in sales and a market share drop of 1%.TVS motors lost over 26% sales volumes and a market share dip of 0.6%.

The demand for the two wheelers this fiscal have been impacted by 5 to 6 % by the COVID-19 second and third wave, also the delay in harvest impacted the rural demand for the two wheelers especially motorcycles which contribute 50 to 60% of the rural sales volumes (Anuj Sethi, crisil 2022). The two wheeler industry has taken more than three price hikes which has resulted in the 6 to7 % higher prices over previous years. The increase in price has resulted in delayed recovery in two wheeler sales (crisil 2022)

Looking at the last three year two wheeler sales trend it has been observed that the decline has resulted in lower numbers and the sales figures for current year are comparable with the 2014 fiscal sales (Gautam shahi, crisil 2022)

Figure 2: CRISIL Report 2022



BS VI Regulations and Impact on the Price of the Two Wheelers

Times Drive,(2022) the Honda Activa largest selling scooter from the Honda stable was costlier by its BS IV version by 9000 Rs. , the BS VI Bikes by Suzuki Motorcycles were tend to get costlier by 12000 Rs. over the BS4 version. The various models of commuter bikes upgraded a cost up of 8000 Rs. over the BS 4 base versions. The prices which were increased on account of BS VI impacted the budget of the consumers of the two wheeler segments as on one account the vehicle cost increased and on the other the fuel prices were increased resulting in higher cost of ownerships. The reason for the same was the investment in the new engine technology adopted to control the emission norms of BS VI, all the two wheelers had to be fitted fuel injectors and a bigger catalytic converter in order to control the emission norms.

The other cost increase was due to the addition of some additional features and cosmetic changes in the two wheelers in order to justify for the price increase. The popular 125 cc model of Honda, Shine in India migrated from a four speed gears in BS IV version to a five speed gear configuration in BS 6 which resulted in the increase of 10000 to cost up over the BS IV version. The increase in cost of two wheeler was observed to be high in comparison to the cars as the cars were already using fuel injector technology whereas in two wheelers most of the players had to introduce the fuel injection technology resulting in change in the engine technology.

The Second Hand Two wheeler market increased in India during the COVID-19 wave. Sasidhar Nandigam, (Financial Times,2021) with the economic slump and job losses, many consumers are shifting to the second hand two wheeler markets as they have to pay less and can still get the BS IV vehicles which are cheaper to maintain and have offer better mileage.

Impact of the Job Losses on Account of COVID-19 and its Effect on Two Wheeler Sales

Table 3:

Details recorded in All India Quarterly Establishment based Employment Survey (AQEES)

Sectors	Number of Employees (in Lakh)			
	Prior to Lockdown (before March 25, 2020)		As on July 1, 2020	
	Male	Female	Male	Female
Manufacturing	98.7	26.7	87.9	23.3
Construction	5.8	1.8	5.1	1.5
Trade	16.1	4.5	14.8	4
Transport	11.3	1.9	11.1	1.9
Education	38.2	29.5	36.8	28.1
Health	15	10.6	14.8	10.1
Accommodation & Restaurants	7	1.9	6.2	1.7
IT / BPOs	13.6	6.3	12.8	6.1
Financial Services	11.5	5.9	11.3	5.7
Total*	217.8	90	201.5	83.3

ENS economic bureau (2021) mentioned based on the above table the widespread job losses in various sectors of India. The female employment in manufacture sector reduced at 23.3 lacs in July 2020 from 26.7 lacs in March 2020, whereas job reduction for the male gender in same segment was 87.9 lacs from 98.7 lacs in the same period. In the construction industry Female workers jobs reduced from 1.8 Lacs to 1.8 lacs, and male workers reduced to 5.1 lacs from 5.8 lacs during the lockdown. Trading sector was also impacted and the Female employment shrank to 4 Lacs (as on July 1, 2020) from 4.5 lacs (as on March 25, 2020), while male employment reduced to 14.8 Lacs (as on July 1, 2020) from 16.1 Lacs (as on March 25, 2020).

The impact of BS VI regulation on the sales of the two wheeler was observed to be quite high the price increase on the new BS VI two wheeler ranged from 16 to 22 % on account of the cost increase of the parts and also a subsequent increase in the fuel prices led to the increase in the operational cost of the two wheeler for the consumer (G balachandar, Hindu business line, 24 Feb 2022).

CONCLUSION

Based on our finding it has been observed that the two wheeler sales in India got affected by both the COVID-19 and Price Increase due to BS VI Regulations. The job losses on account of frequent lockdowns and dip in the economy of various sectors such as Manufacturing, Travel and tourism, airlines, hospitality and service impacted the budget of the Indian household, which resulted in taking drastic measure by households to reduce the cost of

living. The consumers switched to second hand vehicles for their daily commute or rectified their own vehicle to continue an extra mile than investing in a new two wheeler which was expensive to procure and also reliability of the new technology is yet to be proven.

REFERENCES

- 10 million lost jobs in Covid 2nd wave, 97% households' income declined: Cmie. Business Today. (2021, June 1). Retrieved September 6, 2022, from <https://www.businesstoday.in/latest/economy-politics/story/income-of-97-households-declined-since-covid-19-pandemic-began-cmie-298381-2021-06-01>
- 2020 lockdown: Most job losses in blue-collar sectors; finserv, it STEM fall. The Indian Express. (2021, November 30). Retrieved September 6, 2022, from <https://indianexpress.com/article/business/2020-lockdown-most-job-losses-in-blue-collar-sectors-finserv-it-stem-fall-7648073/>
- Balachandar, G. (2022, February 24). Two Wheeler's prices increase 16-22% in 2 years due to BS-IV & Spike in commodity prices. Two wheeler's prices increase 16-22% in 2 years due to BS-IV & spike in commodity prices - The Hindu Business Line. Retrieved September 6, 2022, from <https://www.thehindubusinessline.com/companies/two-wheeler-prices-rise-16-22-per-cent-in-2-years-on-bs-vi-norms-spike-in-commodity-prices/article65080746.ece>
- BS 6 vs BS 4: Why are bs 6 two-wheelers so costly as compared to their BS 4 models? Latest News, Breaking News, News Today, Live News. (n.d.). Retrieved September 6, 2022, from <https://www.timesnownews.com/auto/features/article/bs-6-vs-bs-4-why-are-bs-6-two-wheelers-so-costly-as-compared-to-their-bs-4-models/569622>
- Chandra, J. (2021, October 4). 'Most disproportionate loss of jobs because of the first wave of covid-19 was among urban women'. Return to front-page. Retrieved September 6, 2022, from <https://www.thehindu.com/news/national/most-disproportionate-loss-of-jobs-because-of-the-first-wave-of-covid-19-was-among-urban-women/article36831134.ece>
- Correspondent, S. (2022, March 29). Covid-19 impact on livelihoods continues with job loss, reduced earnings, finds survey. Return to front-page. Retrieved September 6, 2022, from <https://www.thehindu.com/news/cities/bangalore/covid-19-impact-on-livelihoods-continues-with-job-loss-reduced-earnings-finds-survey/article65271221.ece>
- The COVID-19 in India- impacts on the economy and the automobile sector. (2021). Journal of Contemporary Issues in Business and Government, 27(03). <https://doi.org/10.47750/cibg.2021.27.03.028>

- Guest. (2021, April 9). Financial express. The Financial Express Stories. Retrieved September 6, 2022, from <https://www.financialexpress.com/auto/industry/used-bikes-sales-covid-19-pandemic-used-honda-bikes-used-bajaj-bikes-used-scooters-exchange/2229872/>
- Ifpri.org. (n.d.). Retrieved September 6, 2022, from <https://www.ifpri.org/blog/addressing-covid-19-impacts-agriculture-food-security-and-livelihoods-india>
- Impact of covid-19 on employment in India. Times of India Blog. (2021, June 9). Retrieved September 6, 2022, from <https://timesofindia.indiatimes.com/readersblog/small-thoughts/impact-of-covid-19-on-employment-in-india-33336/>
- Impact of covid-19 on employment in urban areas. PRS Legislative Research. (2022, September 6). Retrieved September 6, 2022, from <https://prsindia.org/theprsblog/impact-of-covid-19-on-unemployment-in-urban-areas#:~:text=In%20April%202020%2C%20the%20International,poverty%20due%20to%20the%20pandemic.>
- Impact of covid-19 on Indian economy - times of India blog. (n.d.). Retrieved September 5, 2022, from <https://timesofindia.indiatimes.com/readersblog/shreyansh-mangla/impact-of-covid-19-on-indian-economy-2-35042/>
- Sahoo, P., & Ashwani. (2020). Covid-19 and Indian Economy: Impact on growth, manufacturing, trade and MSME sector. *Global Business Review*, 21(5), 1159–1183. <https://doi.org/10.1177/0972150920945687>
- Siam.in. (n.d.). Retrieved September 5, 2022, from <https://www.siam.in/uploads/ar/22-22ndAnnual%20Report%202019-20.pdf>
- Two-wheeler sales volume to fall for third straight year. CRISIL. (n.d.). Retrieved September 6, 2022, from <https://www.crisil.com/en/home/newsroom/press-releases/2022/02/two-wheeler-sales-volume-to-fall-for-third-straight-year.html>
- What coronavirus could mean for the global economy. Harvard Business Review. (2021, February 1). Retrieved September 6, 2022, from <https://hbr.org/2020/03/what-coronavirus-could-mean-for-the-global-economy>
- Zimmermann@stlouisfed.org, & S. Mahendra Dev & Rajeswari Sengupta. (2020, February 2). Covid-19: Impact on the Indian economy, by S. Mahendra Dev; Rajeswari. Indira Gandhi Institute of Development Research, Mumbai Working Papers. Retrieved September 6, 2022, from <https://ideas.repec.org/p/ind/igiwpp/2020-013.html>

Business Opportunities in Electric Segment

Prachi Tapase & Shubham Surve

Students, IES-MCRC, Mumbai

ABSTRACT

In the growing rate of air pollution, electric vehicles are adopting a potential shift in the automotive industry. Electric vehicle has the potential in the automotive industry and are sustainable for a long period of time. Indian Government is also playing a major role in adaption and promotions of electric vehicles. Electric vehicles are now aggressively entering the Indian market and making a significant change in the automotive industry. Government of

India is also taking initiatives in building charging infrastructure for the betterment and promotions of electric vehicles. This created the opportunities for the entrepreneurs to enter in the business of electric vehicles and charging stations simultaneously.

Public busses, taxis fleets, two-wheelers, and three wheelers are expected to be the early entrants in the infrastructure. Hence, the sweet spots in the business are turning around to be in the business of fast charging infrastructure. These charging station setups can be installed in the public places such as public parking. Infrastructure required for the public station chargers are minimal in comparison with the dedicated charging stations. This paper is an attempt to understand the issues involved in electric vehicle charging infrastructure and its adoption.

Key words: *Entrepreneurship, business, start-ups, environment*

INTRODUCTION

Charging stations ensures the reliability of the electric vehicle users of different makes and models with varying battery capacities. Charging stations can simply operate by altering the mechanism of current and voltage and deliver specific power as per the requirements of fast as well as slow charging. This altering of the current and voltage is regulated with the help of controller, which perform power delivery to the batteries. The setup is done so as to monitor and regulate the operations of the charging process in the systematic and documented manner and ensured that there are no changes in the electricity being supplied to the vehicle directly or the battery individually. The device is an IoT programmed which is secured and can be monitored at the customer as well as merchant side. This enables the user and the merchant to monitor and analyse the units of electricity consumed, the time for the vehicle is being charged and the total amount paid by the customer. Cost of setting up the charging station in the near future is as low as ten thousand Indian rupees, which is affordable by most of the retail outlets in India and shopping malls. Offices can also be a part of the charging station

infrastructure in the coming age as the maximum time spent by the user is in the office where he can put his vehicle on charge and till, he leaves his office the vehicle ready to move.

RESEARCH PROBLEM

The overall demand for electric vehicle is increasing due to rising prices of fuels and environmental factors like air and noise pollution, but the sales of electric vehicles are not up to the mark in alignment with the demand. There are various factors like adaptability of the end user, range anxiety of electric vehicle, battery related issues and it also includes improper charging infrastructure for electric vehicles. Charging station should include at least three main factors.

1. Proper voltage and current supply to the vehicle
2. Battery management system
3. An application or smart cards for tracking on the time and current consumed.

Charging an electric two-wheeler or a four wheeler takes sufficient amount to full charge the vehicle. Hence, charging station merchant should also include or take care of the customer waiting time till the vehicle is charged. He should ensure proper waiting place for the customer. Lack of charging station services is observed for the abovementioned issues. Hence customer references turn in to buying an IC powered references turn in to buying an IC powered vehicle.

Other issues include improper voltage or current supply. This issue may directly hamper the battery of the vehicle if improper current or voltage is being supplied across the loop. To overcome the voltage supply issue, fast as well as standard charging facility should be provided. Along with BMS (Battery Management System) station should ensure the proper IoT system is being used for tracking the business as well as electricity.

This brings in the opportunity to enter in to the business of electric vehicle charging stations and grab the first mover advantage in order to generate profits and hence increase the sales of electric automobiles.

So, this study will explore the business opportunities in setting up an electric vehicle charging station and also providing additional services along with the charging facility. It will aid in the development of new start-up and entrepreneurship opportunities and provide new understanding about the subject.

OBJECTIVES OF THE STUDY

Considering the various factors which are being as barrier for the growth of electric vehicles, this research was targeted towards the merchants and business owners who could access the opportunity of setting up an electric vehicle charging station.

1. To explore the perception of the business owners and merchants towards setting up a charging infrastructure.
2. To understand the geographic profiles of the people willing to set up an electric vehicle charging stations.
3. To explore the opportunities for housing societies as well as new constructions for creating electric vehicle charging infrastructure.

RESEARCH METHODOLOGY

At the outset to develop the preliminary understanding of the research area, personal interviews were conducted targeting the SME and food joints operating locally over a period of time in the same area. This helps in their understanding of the local people attitudes closely. Also, the personal connect build previously with the people could help them to elevate the business more rapidly.

Around 20 personal interviews were carried out with the potential prospects in the area of Goregaon and Jogeshwari where the electric vehicle charging infrastructure can be established. The reason of carrying out personal interviews is that hundred percent data output can be expected. Along with merchants, business owners and society members developers were also interviewed.

Data collected by conducting personal interviews was concluded on the basis of interpretation of the merchant and business owners and their perspectives were concluded at the end, claiming their interest in the charging station infrastructure and issues or concerns they could be expecting. Along with the data and insights collected, future projections of the owners and merchants were concluded positively.

DATA ANALYSIS

Out of the total number of prospects interviewed personally, were observed to be male on a very large scale. Diversified industry was chosen for interviewing potential prospects. This helped in analysing data and perceptions of the people working and carrying out business in diversified industry sectors. This also provided us with an opportunity in accessing diversified industries. Industries chosen were in major sectors such as Hotel Industry, Battery segment, Housing societies, Food joint, Electric two wheeler showrooms and Individual user for instance.

A major factor for the research was to determine the attitude and willingness of people towards installation of the electric vehicle charging station which also included their awareness of the charging infrastructure and their willingness in installation for the same. Positive output was observed after being aware about the charging infrastructure investment and their returns.

After collection of data from prospects, it was observed that the merchants and SMEs are willing to take the first mover advantage of the revenue generated from the electric vehicle charging station and also to attract customers by showcasing their compatibility with the changing environment. People into food joints were positive with the idea of installing the charging station, but there will be some sort of delay in making up with the permissions and formalities with the franchiser.

As developers are trying to innovate their constructions by using eco-friendly carbon cure concrete. after being aware about the charging infrastructure at the basement parking or creating a dedicated electric vehicle charging zone for tenants, they are planning to market it as an eco-friendly construction, over which they can charge a price premium and generate business through marginal profits.

RESULTS

Research conducted indicates that all the industries mentioned in the analysis is ready and acceptable to enter into the electric transformation. As fuel prices are skyrocketing day by day along with the increasing hazardous environmental factors awareness is increasing among the prospects interviewed. Hence, change in the electric transformation is likely to increase in the coming years ahead.

While interviewing, it was observed that understanding of the environmental concerns differed from individuals to individual. This included, global warming, increasing air pollution, melting of glaciers, ozone layer depletion and climate changes. Among the above mentioned, first two concerns were on the top of the mind awareness.

REFERENCES

- Dr. Bryn Walton, Dr. Jamie Hamilton, Geneviève Alberts, Saskia Fullerton-Smith, Edward Day, James Ringrow. (2020, july 28). *Deloitte*. Retrieved from Google: <https://www2.deloitte.com/uk/en/insights/focus/future-of-mobility/electric-vehicle-trends2030.html>
- 2021, G. E. (2021, july 4). *Trends and developments in electric vehicle markets*. Retrieved from Google: <https://www.iea.org/reports/global-ev-outlook-2021/trends-and-developments-inelectric-vehicle-markets>
- Chih-Kuan Lin & Kai-Shuan Shen. (2022, july 8). *Exploring the O2O (online to offline) marketing design of electric vehicles based on consumers' emotions*. Retrieved from Google: <https://link.springer.com/article/10.1007/s42452-022-05091-z>

- Council, E. V. (2021, June 2). *EV Consumer Behaviour*. Retrieved from Google: <https://www.fuelsinstitute.org/Research/Reports/EV-Consumer-Behavior/EV-ConsumerBehavior-Report.pdf>
- Council, I. E. (2020, june 24). *Analysis of the Electric Vehicle Industry*. Retrieved from Google: https://www.iedconline.org/clientuploads/Downloads/edrp/IEDC_Electric_
- Shanjun Li, Lang Tong, Jianwei Xing, and Yiyi Zhou. (2021, June 2). *The Market for Electric Vehicles: Indirect Network Effects and Policy Design*. Retrieved from Google: <https://www.journals.uchicago.edu/doi/10.1086/689702>

Excerpts of Valedictory Address

Dr. Kiran Sharma

Dr. Kiran Sharma, Area Chairperson Marketing and International Business, KJSIMSR, was the Session Chair. She was discussed about the future research direction in the field of business and management. She advised the researchers to maintain childlike enthusiasm, narrow down and deep dive to understand the objective, constructing the same research in a new context, location and culture and re-assessing and expanding theory, framework or model, one has addressed in his / her research.

Best Paper Presentation Award

On the basis of fair evaluation by a panel of session chairs and blind reviewers, three of the fifteen presenters had been chosen as the Best Paper Awardees. Dr. Ravindra Dey for his research paper titled as *To Understand the Role of Well-Being and its Impact on Stress Management and Resilience on Employees in an Organization in the Post Pandemic Situation*, received the first best paper award.

Ms. Saie Parab and Dr. Chandrasekhar Kaushik for their research paper titled as *Relevance of Age in Improving Brand Awareness through Social Media Platform*, received the second best paper award.

Ms Ravijaa Mehta for her research paper titled as *Using Decoy as a Nudge: Effects Of Decoy and Psychological Pricing In Relation To Buying Behaviour*, received the third best paper award.

The Jury members awarded the certificates to the awardees and all the presenters. The best three papers mentioned above will be published in volume four issue two of **The Management Quest**, a Bi-Annual Research Journal of DSIMS, under the aegis of Remsons Centre for Management Research, with Online ISSN: 2581-6632.

Concluding Note

A unique endeavor on the part of the Institute was to host a conference on ‘Post Pandemic Business Landscape: Recreating Sustainable Competitive Advantage’. The Conference was indeed a grand success.

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