

**CSIBER**

ISSN 0974-763X

UGC-CARE Listed Journal

# **SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)**

**Listed in UGC-CARE Journals Under Group I**

**Volume 14, No. 3**

**July, 2024**



**Chhatrapati Shahu Institute of Business  
Education & Research (CSIBER)**

(An Autonomous Institute)

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# SOUTH ASIAN JOURNAL OF MANAGEMENT RESEARCH (SAJMR)

ISSN 0974-763X

(An International Peer Reviewed, Referred Research Journal)



Published by  
CSIBER Press, Central Library Building

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## **South Asian Journal of Management Research (SAJMR)**

**Volume 14, No. 3, July 2024**

**Editor: Dr. Pooja M. Patil**

**Publisher  
CSIBER Press  
Central Library**

Chhatrapati Shahu Institute of  
Business Education & Research (CSIBER)  
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**ISSN: 0974-763X**

**Price: INR ₹ 1,200/-**

**Editor: Dr. Pooja M. Patil**

**Distributed By**

**CSIBER Press**

**Central Library**

ChhatrapatiShahu Institute of  
Business Education & Research (CSIBER)  
University Road, Kolhapur – 416004, Maharashtra, India.  
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## **Editorial Note**

South Asian Journal of Management Research (SAJMR), is a scholarly journal that publishes scientific research on the theory and practice of management. All management, computer science, environmental science related issues relating to strategy, entrepreneurship, innovation, technology, and organizations are covered by the journal, along with all business-related functional areas like accounting, finance, information systems, marketing, and operations. The research presented in these articles contributes to our understanding of critical issues and offers valuable insights for policymakers, practitioners, and researchers. Authors are invited to publish novel, original, empirical, and high quality research work pertaining to the recent developments & practices in all areas and discipline.

Cross-functional, multidisciplinary research that reflects the diversity of the management science professions is also encouraged, the articles are generally based on the core disciplines of computer science, economics, environmental science, mathematics, psychology, sociology, and statistics. The journal's focus includes managerial issues in a variety of organizational contexts, including for profit and nonprofit businesses, organizations from the public and private sectors, and formal and informal networks of people. Theoretical, experimental (in the field or the lab), and empirical contributions are all welcome. The journal will continue to disseminate knowledge and publish high-quality research so that we may all benefit from it.

**Dr. Pooja M. Patil**  
Editor

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# Glass Ceiling: A study of women in Senior Management roles within the Mauritian Banking Sector

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## Abstract

Are females viewed as key assets in leadership today or are they merely 'indoctrinated slaves' serving the company in lower positions, to the commands of men? Years have elapsed since the term 'Glass Ceiling' surfaced to describe the inferiority of women as compared to males and this gender disadvantage, peculiarly with regards to rising above a certain level, is still very much perceptible within organisations. On a global plane, this conundrum is verily present and for the sake of this paper, the focus is on the Mauritian Banking Sector wherein this effect shall be studied with respect to female employees. This study shall have as focal point the level to which glass ceiling factors result into the underrepresentation of women in senior management positions within Mauritian Banks. Being a highly flourishing domain, Banking has been chosen given that we still have not seen the emergence of a female chief executive in a Mauritian Bank. The study, targeted to survey 250 female bankers, emerged with glaring results which ultimately culminated into recommendations to Banks in the form of Flexible Work Arrangements, Equitable Workplace Environment and early promotions inter-alia to better the representation of women in senior positions.

**Keywords:** Glass Ceiling, Women, Mauritian Banking Sector, Senior Positions.

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## Introduction

Going back millennia in the history, women's roles within the society proved to be mainly limited to their households. This retrogressive pattern knew a metamorphosis only when women were able to break the shackles of the taboo revolving around their responsibilities being restricted to households. In the wake of the astronomical steps taken by women worldwide, there has been the spark of global topics such as Gender Equality which marked its prominence, peculiarly within the realm of employment and career advancement. However, despite the leaps of advancements taken by women within their careers, we are still faced with the question – "Has the summum bonum of gender equality been attained? Are women now at par with men?"

It is still not unwonted to seeing women executing the same amount of work as male colleagues whilst holding the same credentials but yet being faced to a very meagre possibility for them to be promoted to a senior position. Often, we witness that a qualified person wishing to climb the stairs of the organisational hierarchy is impeded due to discrimination, most likely based on race or gender (Rath&Mishra, 2022). This is actually termed as Glass Ceiling which reflects vertical discrimination, most frequently against females, encumbering them from striding beyond a certain level within the company due to the gender biases or in the words of Dhote et al. (2023), it is "an invisible barrier preventing them from further ascending within their careers."

It is surmised that this is mainly a concern for the less developed economies however, the advanced economies are not any immune to same and even though Glass Ceiling (hereinafter GC) is perceived just as a fallacy by many, it remains a verity effectively encapsulated within "many organisational cultures, policies and strategies besides women's own inadequacies" (Misra et al., 2012).

"Glass ceiling, sticky floor, pink collars refer to some disparaging colloquial terms" connoting the unbalanced ratio of men at the driving seat of large organisations whilst women still have to attain workplace equality regardless of the array of promises made with respect to equality, asseverating ostensibly that all people are equal, deserving "equal rights, equal opportunities and equal pay for equal effort" (Earl, 2019). Women are often burdened with the responsibility to continuously prove themselves by being lean and mean but, the stigma of not being strong leaders in a quasi-chauvinistic society still inhibits them.

Notwithstanding the significant strides being made towards gender equity in various sectors, women continue to encounter pervasive barriers that hinder their access to and progression within leadership and senior management roles. One such barrier, often termed as glass ceiling "is a metaphor used to represent an invisible barrier that describes unfairly discriminatory practices...preventing women from achieving higher positions in a job, specific field of work, or organisation, etc." (Dhote et al., 2023).

The gender disparities evident in management and leadership roles stand as a global concern. Despite significant progress in education and workforce participation, women remain significantly underrepresented in leadership positions across diverse industries worldwide (World Economic Forum, 2020). This underrepresentation extends to senior management roles, which has a cascading effect on the overall gender balance in organisations.

In the context of banking and finance, the issue is especially glaring. In fact, “in many countries, women represent nearly half of the financial services industry” (Catalyst, cited in Shaji et al., 2021) however, the financial sector has historically been characterized by a pronounced gender gap, with women facing considerable challenges in accessing executive and managerial positions. This gender imbalance has been perpetuated by various factors, including entrenched gender biases, workplace cultures that favor traditional male leadership styles, and limited opportunities for mentoring and sponsorship (Morrison & Von Glinow, 1990).

Suntoo (2019) opines that “the percentage of women in senior levels is growing slowly. At this little pace, the parity with men would not be reached for decades.” The Investment and Financial Services sector encompasses 52% of female population, showing a remarkable headway (Marketlinks, 2023) but it remains incandescent of a trend to see that the limits of the strides being mainly to junior positions within the Banking sector whilst they have diminishing imprints in ascending corporate levels.

This gender disparity within the Mauritian banking sector is not just a local phenomenon but reflects broader global patterns. It raises salient questions about the equitable distribution of power and opportunities within organisations and the potential impact on organisational culture, performance, and effectiveness. As a vibrant and vital component of the nation's economy, the Mauritian banking sector is a driving engine of the country's financial landscape and economic growth. However, beneath this outward success story lies a gender imbalance in the sector's leadership, representing a microcosm of the broader gender inequality issue in Mauritius.

Gender inequality in leadership and management positions is a persistent issue globally, being deep-seated to societal and organisational biases. The underrepresentation of women in senior roles remains a significant challenge in various industries, including the banking sector. In the context of Mauritius, a nation with a rapidly growing economy, the banking sector stands as a critical contributor. However, there still appears to be lesser women in management ranks as compared to males.

This underrepresentation of females in management roles comes up with critical reflections on the distribution of power and opportunities within the sector, as well as the potential consequences for organisational performance and effectiveness. To date, there is a scarcity of empirical researches that comprehensively examine the experiences and challenges of women in management roles within the Mauritian banking sector.

The research aims to bridge this knowledge gap by investigating the representation of females in senior management roles, identifying the barriers they face in career advancement and proposing strategies for promoting gender equality within the Mauritian banking sector. By so doing, it aims to providing valuable viewpoints that can inform policies and practices triggered towards reducing the impact of the glass ceiling, fostering more gender equality and enhancing the overall effectiveness of the sector.

By addressing these issues within the Mauritian banking sector, this study contributes not only to the advancement of gender equity in this specific context but also adds to the broader discourse on gender diversity in leadership, which is crucial for creating more inclusive and effective organisations worldwide. This study assesses the extent to which women are underrepresented at the highest levels in the banking sector in Mauritius, *ceteris paribus*. Hence, assessing what are the possible causes?

In line with the aims of this paper, its research objectives are firstly to acknowledge and understand the concept of glass ceiling in the workplace, mainly with respect to the Banking sector, to assess the distribution of females across the different levels of the hierarchy within the Sector and investigate factors which are impeding their movement, to gather the opinions of employees regarding the representation of women at the highest levels within this sector and lastly to make recommendations to the management of the banks to enhance the promotion of women in the banking field.

The examination of gender disparities in management within the Mauritian banking sector is imperative for several reasons, adhering with international commitments and initiatives. Secondly, promoting gender diversity in leadership positions can lead to improved decision-making, enhanced corporate governance, and ultimately, better organisational performance (Catalyst, 2011 cited in McKinsey & Company, 2020). By addressing the gender imbalance in management roles, the Mauritian banking sector can potentially unlock significant economic and social benefits.

Moreover, the Mauritian government has continuously endeavoured to promote gender equality and women's empowerment through various policies and initiatives. However, there are insufficient empirical materials which examine the status of women in management roles within the Mauritian banking sector. This research purports to bridge this gap by establishing a comprehensive understanding of the see-saws encountered by women within the sector.

The study will be one of a limited number of studies carried on the topic and as such, it will shed extra light on glass ceiling factors restricting the access of women to management roles in the banking sector; the extent to which glass ceilings are present in financial organisations; on whether the limited presence of women in management positions is due to women's inadequacies or the glass ceiling or if it is a combination of both. Through this study, there lies the aim to spotlight the growth barriers to which banking institutions are exposed and which, entails the possible glass ceiling towards women.

## **Review of Literature**

The recent years have evidenced the emergence of an increasing tendency towards gender diversity within the workplace with organisations progressively acknowledging the importance of having a varied talent pool. Notwithstanding the advancements made, there continues to be a conspicuous lack of female representation in leadership positions, notably within the banking industry. In fact, when we consider the Mauritian banking sector, it remains indubitable that women have made significant leaps but underneath this stride lies the question as to why Mauritian banks have not yet witnessed the day where a woman has undertaken the position of a Chief Executive. This chapter shall provide a detailed anatomy of glass ceiling within the said sector and the many underlying concepts associated with it whilst establishing the different correlations with regards to factors piquing this effect.

The comprehensive analysis of gender and gender differences may be possible with the aid of the numerous theories and studies which have been effectuated within this realm. Cotter et al. (2001) have expounded that a significant correlation exists between glass ceiling and gender. This section shall have as nucleus certain theories relating to glass ceiling.

### **Social Role Theory**

Ridgeway (2001) explains that "Eagly's (1987) social role theory argues that widely shared gender stereotypes develop from the gender division of labor that characterizes a society." Extrapolating from this explanation, the social role theory outlines that gender differences and similarities are mainly deep-rooted to the social roles assumed by both genders.

As a matter of fact, the surfacing of glass ceiling is linked "to gendered social systems where work was 'designed by men and for men' and where patriarchy described work roles in terms of gender, has resulted in stereotyping" (Ertan & Cavlan, 2020). The authors further explain how the stereotyping of women as kind and caring whilst males are viewed as strong and achievement-oriented has triggered the "think leader, think male" mentality. Ertan & Cavlan, 2020). Morgenroth and Ryan (2018) share the viewpoint that "these gender stereotypes stem from the fact that women and men are over- and underrepresented in different roles in society" – with women overrepresented in domestic roles and underrepresented in leadership ones as compared to men. Eagly and Wood (2012) further stipulate that understanding the sources of role asymmetries mirrors a futuristic challenge for the champions of gender equality given that studies have revealed "that gender stereotyping has a negative impact on the career prospects of women" (Ertan & Cavlan, 2020).

### **Role Congruity Theory**

The Role Congruity Theory (RCT) was conceived in 2002 by Early and Karau to establish how and why prejudices are developed against women leaders (Carmen et al., 2023). The authors have advantage glossed how this Theory has gained increasing attention amidst Management scholars who try to apply it for considering the consequences resulting from these gender-based prejudices. Eagly and Karau (2002) explicate that "to the extent that leader roles are less masculine, they would be more congruent with the female gender role, and therefore the tendency to view women as less qualified than men should weaken or even disappear." Ertan and Cavlan (2020) also add that "the role of incongruity for women in leadership positions arising from glass ceiling creates prejudices that produce barriers for promotion and their effectiveness at top management positions."

## **Gender Conflict Theory**

Having emerged from a myriad of empirical theories developed, the GRC Theory “is defined as a psychological state in which socialized gender roles have negative consequences for the person or others.” Boundless (2020) further explains that under this theory, men are deemed to be in dominance over women who are subordinates and according to “this theory, social problems are created when dominant groups exploit or oppress subordinate groups. Therefore, their approach is normative in that it prescribes changes to the power structure, advocating a balance of power between genders.”

## **Workplace Discrimination**

In Babic and Hansez (2021)’s viewpoint, males and females are often exposed to differential treatments within the workplace. Workplace discrimination encompasses a range of manifestations, including explicit kinds like harassment as well as more nuanced instances such as being overlooked for advancement opportunities or being allocated less desired responsibilities. It is suggested that “perceiving differences in a company’s treatment of women would lead workers to believe that there is a glass ceiling in the company” (Babic&Hansez, 2021).

This barrier suggests the first criterion as put forth by Cotter et al. (2001). According to a 2023 report from the McKinsey & Company, “for every 100 men hired and promoted to manager, only 87 women advance” (Pazzanese, 2023). Within the Pakistan Banking sector as well, Khalid and Ijaz (2019) suggest that “jobs requiring similar skills, qualifications or experience tend to be poorly paid and undervalued when they are dominated by women rather than by men.”

When we talk of workplace discrimination, there is this idea where “women are performing the same as men, but their performance is discounted or even evaluated more poorly even though it's exactly the same” on grounds of their gender (Lockert, 2022). Additionally, when it comes to promotional aspects, workplace discrimination renders women as being least favored. As explained by Larsen (2012), “the glass ceiling asserts that there is a limit to how high women and minorities can be promoted.” McKinsey & Company (2023) explains that the outnumbering of women by men leads to fewer women in management roles and hence, there is a decreasing trend of women at every subsequent stage. Shaji and Joseph (2021) further add that GC at the workplace is triggered by differential treatment of women and that “another barrier is the paucity of qualified women in the pipeline to be considered for promotion.”The following hypothesis is therefore proposed:

H1: Workplace discrimination will have a positive effect on the underrepresentation of woman in senior management roles.

## **Gender Stereotype and Unconscious Bias**

Gender stereotypes refer to commonly accepted views on the suitable duties and behaviours that are expected of individuals based on their gender (Eagly & Carli, 2011). Khadri et al. (2023) allude to recent evidences to bolster their cause that the wide perspective of women not being suitable for the position of manager is one of the main issues faced by the females. Parallely, studies have evinced that the disclosure of a woman being a mother leads to biased screening and selection criteria (Heilman et al., 2015).

Another instance illustrating this phenomenon is a study conducted by the Harvard Business School, which revealed that women are subject to lower rates of promotion endorsement compared to males, even when their credentials and experience are same (Moss-Kanter, 2007). The observed phenomenon may be attributed to unconscious prejudice, as shown by the study's findings indicating that managers had a greater tendency to connect leadership attributes with male individuals as opposed to their female counterparts. Balabantaray (2023) explains that “the perception of women as being less competent or suitable for leadership roles can have a significant impact on their ability to advance in their careers.”

Furthermore, the presence of stereotypes may give rise to unconscious biases, which in turn have the potential to impact decision-making processes pertaining to recruitment, advancement, and compensation (Catalyst, 2023). In fact, the concept of unconscious bias pertains to the innate and sometimes inadvertent preconceptions and biases that are universally present among individuals (Catalyst, 2023). The impact of decision-making might manifest in several manners, including our perception and engagement with others. ILM (2023) has rightly put it as “I wonder sometimes, quite honestly, when a role comes up and you get a woman going for it... whether they would just err more to the male application. It’s that kind of unconscious bias.”

Murray (2011) posits that “Unconscious bias is hard to avoid” and it may assume an example as evident as women exhibiting a higher probability of experiencing interruptions and being spoken over during meetings in comparison to males. Venkatesen (2020) shares the idea that the functioning at workplaces may be hobbled by

these biases and organisations have tried to action to uproot this issue from the source, normally by way of unconscious bias training. Nonetheless, Kulik and Rae

(2019) lament that “there is little evidence that this kind of training has a direct effect on women’s representation in senior management roles and it may even inadvertently normalize decision-makers’ stereotype use.” Pazzanese (2023) adds that “backlash for counter-stereotypical actions, unfortunately, still is real.” The following is therefore proposed:

H2: Gender Stereotypes and Gender Bias will have a positive effect on the underrepresentation of woman in senior management roles.

### **Self-Imposed Barriers**

Rajesh and Emmanuel (2019) assert that “the self-confidence of an individual in his/her capabilities needs recognition and reassurance from others as well” and this aspect seems to be a lacuna with regards to women within the Banking Sector. Pazzanese (2023) explicates that given leadership is still mainly associated with men, some females prefer evading the “sandwich position” where bias is present both at below and upper levels. Ganiyu et al. (2018) add that women are reportedly less ambitious than men, impeding their movement across the career ladder. In the same wavelength, Kulik and Rae (2019) elucidate that over time, women tend to succumb to the GC and their ambitions to advancing downs. The authors state further that “if enough women opt out, or opt down, before reaching senior management levels, their organisations will not display the accelerating gender gap in promotions that defines a glass ceiling.” In fact, it is believed that “women often opt out of careers in banking due to a perceived lack of work/life balance and incompatibility with family life” (ILM, n.d.).

Moreover, women find it easier to change organisations when they notice the prevalence of glass ceiling within their organisations and “unfortunately, women who do secure senior-level roles by changing organisations are likely to do so in less desirable organisations—organisations with higher turnover and lower average management salaries or organisations in precarious financial situations” (Kulik and Rae, 2019). One such vivid instance would be Mrs. Flournoy opting out of Pentagon and when “asked what plans she has made for her life after the Pentagon, Flournoy said, ‘Absolutely none,’ other than catching up on sleep and spending more time with her children” (Politico, 2011).

H3: Self-imposed barriers will have a positive effect on the underrepresentation of woman in senior management roles.

### **Lack of Role Models**

The dearth of female role models in executive leadership positions might provide challenges for women in seeing themselves in such roles. This phenomenon may be attributed to the need for women to have visual representation of themselves in positions of leadership, as it fosters a sense of possibility and belief in their own potential to attain such positions. Rajesh and Emmanuel (2021) expound that “in banks, there are very few women who are senior enough to serve as role models and mentors to a large number of aspiring women who enter banks every year.”

Alternatively, “women having attained visibility in top positions of the corporate hierarchy could weaken traditional stereotypes claiming female managers are less capable than male managers, thereby weakening a formidable barrier to the advancement of women in the workplace” (Kurtulus and Tomaskovic-Devey, 2012). From a research effectuated by the University of California, Berkeley, it was observed that women have a higher inclination towards aspiring for leadership roles when they have female figures serving as their role models (Eagly & Carli, 2011). The research furthermore revealed that women who possess female role models have a higher propensity to attain positions of leadership.

H4: Lack of role models will have a positive effect on the underrepresentation of woman in senior management roles.

### **Work-Life Balance**

It is believed that females are faced with higher difficulties than males with respect to work-life balance. It is still common to see the triple burden being carried by women, with women outnumbering men in opting for parental leaves. Khalid and Ijaz (2019) add that “consequently, women have more career interruptions or work shorter hours than men,” having a brunt “on their career development and promotion prospects.” The prevalence of extended working hours and a pervasive culture of excessive effort in several industries might

provide challenges for women in effectively managing their professional and personal responsibilities. This might provide a specific problem for women who fulfil the role of mothers.

A study by the Pew Research Centre in 2015 unveiled that a majority of women (58%) reported facing challenges in achieving a work-life balance, but a smaller proportion of males (37%) expressed similar difficulties (Pew Research Centre, 2015). The research further revealed that moms have a higher propensity compared to dads in expressing the challenges associated with achieving a work-life balance. Khadri et al. (2023) expound that “women’s commitment to family has been considered as one of the factors that restricted women from climbing the top ladder position.”

H5: Work-life balance will have a positive effect on the underrepresentation of woman in senior management roles.

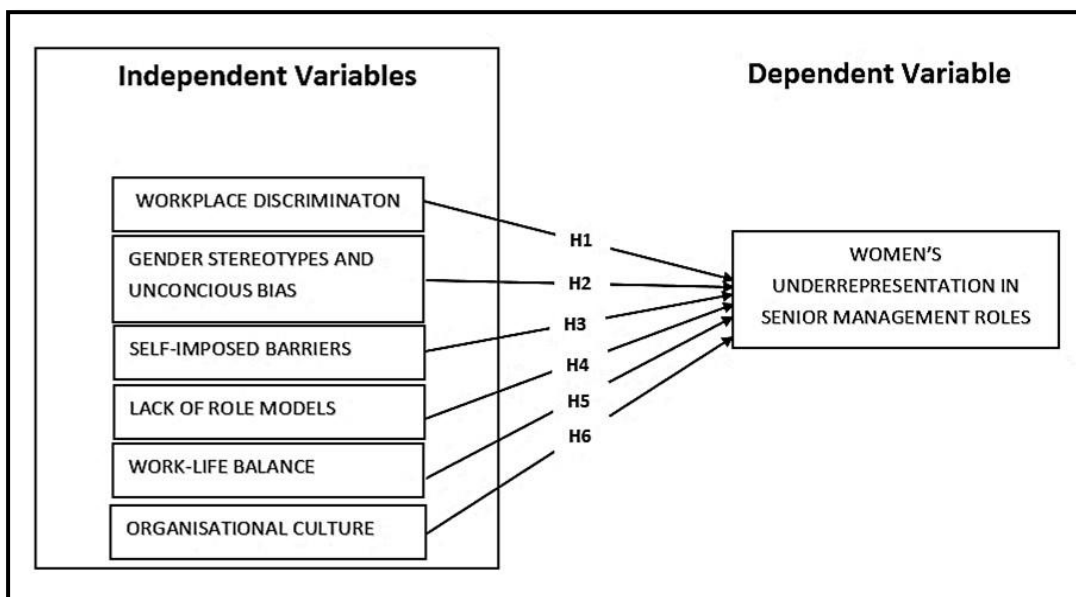
**Organisational Culture**

The influence of organisational culture on the existence of the glass barrier for women should also be acknowledged. The absence of inclusivity and support within a culture might pose challenges for women in their pursuit of professional progression. In Shaji et al.’s view (2020) “the organisational culture in which an employee works can act as a barrier to women employees.” It is mainly within cultures cultivating diverging perceptions and treatment of male and female that are found glass ceiling and its perceptions. A research by ILM showed that 61% of women viewed their current organisational culture as a deterrent to move to senior management levels (ILM, n.d.).

Maheshwari and Lenka (2022) are of the opinion that “the sexist organisational culture may also encourage senior women managers to indulge in queen bee behavior.” In fact, female managers do place hurdles in the path of other women seeking to climb the ladder “including the fallacy of oneself as a reference i.e. female managers’ inner voices telling them ‘If I made it so high up in my career, then others can follow suit and do the same. There is no need to treat them differently.’” Shaji et al. (2020) outline that a key barrier leading to GC is the “lack of senior management commitment to career advancement of women along with complex organisational structure.”

H6: Organisational Culture will have a positive effect on the underrepresentation of woman in senior management roles.

Figure 1 depicts the conceptual framework which incorporates the concepts and variables as described with this section. The purpose of this conceptual framework is to provide a clear understanding of the fundamental elements that impact the representation of women in senior management roles.



Source: Author(s) Figure 1: Conceptual Framework

**Research Methodology**

This study's target population shall be female employees across certain banks within Mauritius. The banking sector in Mauritius currently includes 19 banks which operate under the protective umbrella of the Bank of Mauritius, "of which 5 local banks, 12 foreign banks-predominantly subsidiaries and a few branches, 1 is a joint venture, and 1 is licensed as a private bank" (Mauritius Bankers Association Limited, n.d.).

For the purpose of this survey, only banks offering traditional banking services have been considered, excluding banks providing specialized services. This is actually alluded to as the Sampling Frame – "The list of items from which a sample is obtained is known as the sampling frame" (Zach, 2020). The banks are as follows:

- ABC Banking Corporation Ltd
- Absa Bank (Mauritius) Limited
- AfrAsia Bank Limited
- Bank of Baroda
- Bank One Limited
- Habib Bank Limited
- MauBank Ltd
- SBI (Mauritius) Limited
- SBM Bank (Mauritius) Ltd
- The Mauritius Commercial Bank Ltd

Convenience sampling technique will be availed to single out the banks whilst Quota Sampling technique is used to select the quota of participants for each bank. The study has actually swerved towards a non-probability quota sampling which "does not require numbers that match the proportions in the population" (Nikolopoulou, 2022). This technique allows to study a specific subgroup of interest; female bankers in this case.

10 banks offering traditional banking services have been selected for the survey and 25 questionnaires will be distributed to each bank. Therefore, this study will use a sample size of 250 female bankers for the survey. These sampling techniques were likewise used in a study conducted by Dastidar and Kalita (2020) on "cracking of the glass ceiling in the Indian banking sector" with the research being on a quota of 55 for each of the 2 private banks conveniently selected.

A pilot study was conducted on 20 employees of banks chosen at random so as to make sure that the questionnaire was easily comprehensive to the target respondents and ensure that any type of difficulty that was encountered while filling in the questionnaire, was resolved. In a bid to validate the reliability of the questions, the Cronbach's Alpha Reliability Test was conducted. As a part of the procedure, it was agreed that any identifying information from the individuals, such as their name, phone number, or email address would not be asked. It was assured that the obtained information would be kept in strict confidence and would in no way be used without the prior approval of the participants.

## Results and Discussion

As afore-stated, a total of 250 female employees represented the number to whom questionnaires were distributed. 215 participants in the survey provided valid questionnaires for analysis whilst 10 incomplete questionnaires had to be discarded. As a result, the study was able to acquire a response rate of 86.00%.

The Cronbach Alpha Reliability Coefficient bespoke a consistent measurement and the results of the test coupled with the assessment of their reliability has been tabulated below:

**Table 1: Reliability Test**

Sections	Items	No. of Items	Cronbach's Alpha Value
<b>B</b>	Workplace Discrimination	10	0.865
<b>C</b>	Gender Stereotypes and Unconscious Bias	7	0.956
<b>D</b>	Self-Imposed Barriers	5	0.866
<b>E</b>	Lack of Female Role Models	6	0.866
<b>F</b>	Work life Balance	7	0.942
<b>G</b>	Organizational Culture	9	0.944
<b>Overall Average</b>		<b>44</b>	<b>0.9065</b>

Source: (Authors)

The figure is evidential of there being more single respondents than married and other in the proportion of 72.09%, 22.33% and 5.58%, respectively. The highest percentage of respondents is found in the category between 20 – 25 years while the lowest percentage of in the group is category above 55 with 3.26%. All the categories of age group and marital status have participated in the research.

The overall distribution across all organisational levels indicates a majority with an Undergraduate Degree (53.49%), followed by HSC (20.93%), Diploma (11.16%), and Higher Degree (14.42%). This distribution reflects the educational diversity within the organisation and we have tried to analyse same with respect to the position of women in the financial entities, noting that education level does not really impact level on organisation given that 6.98% of respondents with higher degree are still officers. The results demonstrate that the participants are quite experienced in their jobs. Nonetheless, our questionnaire comprised an “other” option to which we did not receive any respondent.

In this study, the female bankers’ reactions as well as their perceived objectivity of GC have been used to comprehend and acknowledge the presence of GC within Mauritian Banks. It is very crucial to know whether the participants perceive barriers which cloud their movement to upper positions and their stances on same. This will determine to some extent how far GC is still a visible quandary.

**Table 2: Pearson correlation test between Workplace Discrimination and Underrepresentation of women**

<b>Correlations</b>			
		<b>Workplace Discrimination</b>	<b>Underrepresentation of woman in management roles</b>
<b>Workplace Discrimination</b>	Pearson Correlation	1	.872**
	Sig. (2-tailed)		.000
	N	215	89
<b>Underrepresentation of woman in management roles</b>	Pearson Correlation	.872**	1
	Sig. (2-tailed)	.000	
	N	89	89
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Author(s)

The Pearson correlation coefficient of 0.872 indicates a strong and positive relationship between workplace discrimination and the underrepresentation of women in managerial roles. Hence, an increase in workplace discrimination simultaneously triggers a higher deficiency of female representation in senior management roles. The findings suggest that workplace discrimination poses a significant barrier to the advancement of women's professional trajectories, hindering their capacity to achieve positions of leadership. The strong correlation highlights the need to address discriminatory practices and biases inside businesses to provide a fair environment for the progression of women's professional paths.

**Table 3: Pearson correlation test between Gender Stereotypes and Unconscious Bias and Underrepresentation of women**

<b>Correlations</b>			
		<b>Gender Stereotypes and Unconscious Bias</b>	<b>Underrepresentation of woman in management roles</b>
<b>Gender Stereotypes and Unconscious Bias</b>	Pearson Correlation	1	.607**
	Sig. (2-tailed)		.000
	N	215	89
<b>Underrepresentation of woman in management roles</b>	Pearson Correlation	.607**	1
	Sig. (2-tailed)	.000	
	N	89	89
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Author(s)



This table presents a moderately positive correlation (0.607) between gender stereotypes and unconscious bias and women’s underrepresentation in senior management roles. While the correlation is statistically significant, it’s not as strong as the previous analysis which focused on workplace discrimination specifically. This suggests that while gender stereotypes and unconscious bias play a role in underrepresentation, other factors might also be at play. Gender stereotypes and unconscious bias contribute to underrepresentation: This finding confirms that societal and organisational biases against women based on gender roles and expectations can hinder their access to leadership positions. Addressing underrepresentation requires tackling both overt discrimination and subtler forms of bias like gender stereotypes and unconscious bias.

**Table 4: Pearson correlation test between Self-imposed Barriers and Underrepresentation of women Women**

<b>Correlations</b>		
	<b>Self-imposed Barriers</b>	<b>Underrepresentation of woman in management roles</b>
<b>Self-imposed Barriers</b>	Pearson Correlation	1
	Sig. (2-tailed)	.767**
	N	215
<b>Underrepresentation of woman in management roles</b>	Pearson Correlation	.767**
	Sig. (2-tailed)	.000
	N	89

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

Source: Author(s)

This table reveals a strong positive correlation (0.767) between self-imposed barriers and underrepresentation of females in senior management roles. This suggests that women themselves might play a significant role in their underrepresentation in leadership positions, possibly due to internalized biases, lack of confidence, or work-life balance challenges. While external factors like discrimination and bias are crucial, this finding highlights the need to acknowledge and address self-imposed barriers as well to achieve gender equality in leadership. Organisations can play a role in supporting women to overcome self-imposed barriers by providing mentorship, confidence-building programs, and addressing work-life balance challenges.

**Table 5: Pearson correlation test between Lack of Role Models and Underrepresentation of women**

<b>Correlations</b>		
	<b>Lack of Female Role Models</b>	<b>Underrepresentation of woman in management roles</b>
<b>Lack of Female Role Models</b>	Pearson Correlation	1
	Sig. (2-tailed)	.217**
	N	89
<b>Underrepresentation of woman in management roles</b>	Pearson Correlation	.217**
	Sig. (2-tailed)	.000
	N	89

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

Source: Author(s)

The provided data table reveals a weak positive correlation (0.217) between lack of female role models and underrepresentation of women in management roles. The low correlation coefficient indicates that lack of female role models has a relatively small direct impact on underrepresentation of women in leadership positions. This suggests other factors might play a more prominent role. While promoting female role models is valuable, it is important to recognize it might not be sufficient to significantly boost female representation in leadership. Addressing other barriers like workplace discrimination, unconscious bias, and self-imposed limitations is crucial for achieving sustained progress. Moreover, promoting female role models can still be a valuable strategy. Seeing successful women in leadership can inspire and motivate other women to pursue similar career paths and overcome self-doubt.

**Table 6: Pearson correlation test between Work-life balance and Underrepresentation of women**

Correlations			
		Work-life balance	Underrepresentation of woman in management roles
Work-life balance	Pearson Correlation	1	.470**
	Sig. (2-tailed)		.000
	N	215	89
Underrepresentation of woman in management roles	Pearson Correlation	.470**	1
	Sig. (2-tailed)	.000	
	N	89	89

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

Source: Author(s)

This table reveals a moderate positive correlation (0.470) between work-life balance and female underrepresentation in management roles, substantiating that as work-life balance improves, this underrepresentation tends to decrease, though not dramatically. This indicates that work-life balance is one factor influencing underrepresentation, but other factors also play a role. The data suggests that work-life balance challenges faced by women, particularly juggling family and career responsibilities, might contribute to their underrepresentation in leadership positions. Implementing “flexible work arrangements, family-friendly policies, and promoting a healthy work-life culture” can be valuable strategies to support women's career advancement and improve gender equality in leadership (Transperfect, 2023).

**Table 7: Pearson correlation test between Organisational Culture and Underrepresentation of women**

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Correlations			
		Organisational Culture	Underrepresentation of woman in management roles
Organisational Culture	Pearson Correlation	1	.879**
	Sig. (2-tailed)		.000
	N	215	89
Underrepresentation of woman in management roles	Pearson Correlation	.879**	1
	Sig. (2-tailed)	.000	
	N	89	89

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

Source: Author(s)

The provided data table displays a very strong positive correlation (0.879) between organisational culture and female underrepresentation in senior management roles. This suggests that organisational culture plays the major role in influencing this underrepresentation in leadership positions. A supportive and inclusive culture with gender equality principles embedded can significantly upping the representation of women in senior management positions, while a negative culture can hinder their advancement. Investing in creating a more inclusive and equitable organisational culture is crucial for achieving gender equality in leadership.

Focusing on eliminating bias, promoting diversity and inclusion, and fostering a supportive environment for women's career development can lead to significant progress. Organisations should assess their existing culture to identify areas of bias and discrimination and implement targeted interventions to create a more inclusive and supportive environment for all employees, regardless of gender.

#### Summary of Hypotheses and their findings

**Table No. 8: This table summarizes the correlations between various factors and female underrepresentation of in senior management positions.**

	Hypotheses	r2 Value	Significance
H1	Workplace discrimination and the underrepresentation of women in senior management roles	0.872**	Significant
H2	Gender stereotypes and unconscious bias and underrepresentation of women in senior management roles	0.607**	Significant
H3	Self-imposed barriers and underrepresentation of women in senior management roles	0.767**	Significant
H4	Lack of female role models and underrepresentation of women in senior management roles	0.217**	Significant
H5	Work-life balance and underrepresentation of women in senior management roles	0.470**	Significant
H6	Organisational culture and underrepresentation of women in management roles	0.879**	Significant

- Strongest correlations: Organisational Culture (0.879), Workplace Discrimination (0.872) and Self-Imposed Barriers (0.767) have the strongest positive correlation with underrepresentation, highlighting their significant impact.
- Moderate correlations: Gender stereotypes & bias (0.607) and work-life balance (0.470) show moderate impact, suggesting they play a role but to a lesser extent.
- Weakest correlation: Lack of female role models (0.217) has the weakest correlation, indicating its limited direct impact.

All hypotheses are statistically significant, suggesting all factors, to varying degrees, contribute to the underrepresentation of women in management roles. Overall, the data emphasizes the multifaceted nature of underrepresentation.

#### Conclusion and Recommendations

In fact, it is borne out from the findings that GC is very much a vexing issue globally as well as on a domestic plane. Dhote et al. (2023) have rightly explained that GC may be alluded to the imperceptible yet demanding barriers clamping down the progress of women across the corporate ladder. This present research purports to gauge the extent to which women are underrepresented at the highest levels in the banking sector in Mauritius and the causes of this underrepresentation whilst assuming all other conditions remain static.

The cornerstone of this research remains the four main objectives which had been established and responded in the previous chapter. The analysis of the data and the findings trigger the emergence of the following conclusions:

- 40% of the female bankers have agreed to perceiving GC within their institutions, followed by a relatively lower margin of respondents who do not agree to its prevalence. The majority echoes the acknowledgement of the presence of this phenomenon in Banks nonetheless, the rest do not perceive the existence whilst others have demonstrated their uncertainty. Hence, it may potentially be the story of waiting a long time prior to reaching the quasi-fully gender-neutral society. There is this underlying indication that notwithstanding its presence, GC is still not viewed as a perplexing issue by certain bankers.
- 80.47% of respondents opted for a more equitable workplace, reflecting a salient proportion of the sample and hence, depicting that although unconscious of the existence of the barriers, respondents do note the presence of an inequitable workplace.
- Whilst most participants accorded to their organisations being fair to both genders, 40% agreed to a perceived barrier to women's progression to top management levels hence, projecting the larger picture on its impact on underrepresentation.
- In spite of ambivalent opinions with regards to Gender stereotypes and unconscious bias, its presence within the Banking sector did not remain veiled. Howbeit, there is a dearth of existing research findings which could be linked to this factor.
- 35.81% of participants expressed a low level of confidence to use their merits as Rockstone to escalate the corporate levels. This finding coupled with the fact that promotion in organisations is dependent on potential networks, sheds light upon broader pictures of self-imposed barriers leading to underrepresentation.
- Coming to the lack of role models, 125 employees vouched that female managers were outnumbered by male ones in their entities. Whilst we have had other findings which were penchant to disagreement to the statements, this outnumbering remains pivotal to show that there is a lack of role model to push others forward. A considerable 57.67% of employees actually agree that more female managers could be the stepping stone to advancement.
- The present research paper obtained responses mainly from single and relatively young employees with most of them not having children, substantiating that there have not been sufficient number of women bearing the triple burden to depict a diverging perspective on the work-life balance.
- Regarding organisational culture, 32.09% agree and 7.44% strongly agree that there are discouraging corporate cultures, exhibiting wider dimensions on how this affects representation of women.

## **Recommendations**

“There is no ‘perfect’ decision. One always has to pay a price. One always has to balance conflicting objectives, conflicting opinions, and conflicting priorities. The best strategic decision is only an approximation-and a risk” Peter Drucker.

GC is certainly very much a predominant quandary to which Banks are beset and it is advisable that actions are spearheaded to curb this evil. The recommendations as prescribed in this section have been reckoned and doctrine considering certain aspects agreed by bank staffs themselves in their best interests.

## **The Mission and Vision Statements**

The embryonic step to leading an organisation to cultivate and foster gender diversity and inclusion would be through vividly expressed mission and vision statements which pave the direction and itinerary of an organisation. These statements can outline the intentions whilst motivating and leading the team towards a common goal and it could be an inspiring vision of the future, namely, to be an equal and inclusive employer. This is where the signal should come, and this is where the confidence is restored.

### **• Recruitment Stage**

The recruitment process must be transparent, and the team must be professionals, both males and females, recruiting the best according to the pre-established criteria and above all accountable. There must always be the possibility of appeal. Records must be kept for any future query. The wider the base for female recruits, the more probable of a better female distribution in higher positions – the promotional system is always pyramidal.

### **• Early Promotions**

There needs to be more discipline in managing the early promotions and treating them with the same care that is put toward the most senior openings and opportunities. This already sets the tone for future promotional prospects. o Put an end all sorts of microaggressions towards women

This will be a powerful signal towards women’s professional recognition.

Microaggressions undermine women's ability to show up as their best self. They undermine their confidence and their belief that they do have a reason to be at the senior table.

- **Training, Mentorship, Sponsorship and Support**

Women need to have the same degree of training, mentorship, sponsorship, and support, like their male counterparts, in order to get the required degree of confidence to go for higher responsibilities.

- **Women's Ambitions**

It used to be a reflection of society, a misunderstanding or a misperception that ambition from women is something negative, whereas ambition from men is something positive.

In fact, men's, and women's ambitions are the same. The ambition to be a leader, to be promoted, is the same among men and women. Women have gradually become less inhibited about articulating their ambitions. There was even a period when women's ambition was viewed as almost a frontal criticism.

- **Equitable Workplace Environment**

The in-person workplace environment is not an equitable and equally enjoyable environment for both men and women. The environment is still not equitable. Men still describe a better experience when they show up on-site than women do, in terms of getting connectivity, feeling in the know, building their network. This must change to meet the expectations of women also.

- **Flexible Work Arrangements**

This model could definitely be considered as an enabler to facilitate the breaking of the 'glass ceiling' to facilitate women's managerial positions.

- **Developing an Ideal Culture to Promote Equality, Inclusivity, and Innovation**

The banks need to measure their actual culture against the ideal culture, seek ideas and innovations from within on how to transform the organisations and implement actions to close those gaps. By so doing, they will ensure that all employees truly have a voice, they will be heard and everyone will have a say in how their organisations continue to grow from strength to strength.

### **Limitations and Future Research Directions**

The research is de facto not immune to limitations. Out of 250 questionnaires administered, only 215 were returned. Whilst the response rate stands reasonable, the main issue begs the question as to whether 'there are systematic differences between those who answered and those who did not'. Additionally, the study takes into consideration the opinions of female bankers and not male bankers. The latter might have responded in a diverging perspective. A futuristic study may be considered involving the survey of female as well as male bankers. Unavailability of the top management female staffs due to their busy schedules draws a limitation as the opinion of certain senior managers might have changed the course of certain responses.

Another limitation would be the fact that this study has pivoted mostly around quantitative research methods, reflecting certain subjective cum more expressive views which could have had been generated should it have been a blend of qualitative and quantitative approaches. his research has been directed to the Banking Sector only and may not be reflective of trends in other sectors. As such, future studies may be conducted in other pivotal realms such as education, medicine and public sectors, amongst others.

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# The Status of Inter-Sectorial Physical Infrastructural Integration in Selected Sectors in Addis Ababa City, Ethiopia

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## Abstract

The inter-sectorial integration and provision of physical infrastructure and associated services has been affected by a lack of organized collaboration on multiple fronts, including, planning, implementation, and evaluation in the sectors of Addis Ababa city such as electric, road, telecom, and water sectors. The objective of this chapter is to investigate the status of inter-sectorial integration of these sectors at the planning, implementation, and evaluation stages in Addis Ababa City. To fulfill the stated objective this study has used a qualitative research approach. Finally, challenges in infrastructural integration in Addis Ababa during the planning, designing, implementation, and evaluation phases have been identified. Our result shows those different sectors and their departments responsible for various aspects of infrastructure often operate independently, leading to fragmented planning and implementation processes. We also found poor coordination between sectors often results in infrastructure projects being planned in isolation, without considering the interconnectedness of different systems or future needs; budget constraints and competing priorities hindering the implementation of comprehensive infrastructure projects that require collaboration across sectors; sectorial capacity limitation in terms of lack of technical expertise or resources to effectively plan and implement infrastructure projects, leading to delays and inefficiencies; complex bureaucratic procedures and overlapping jurisdiction among different sectors creating obstacles to integrated infrastructure development; insufficient involvement of community members and relevant stakeholders in the planning and evaluation phases resulting in infrastructure projects that do not adequately address local needs or concerns. Thus, addressing those challenges requires concerted efforts to improve coordination among government sectors, enhance institutional capacity, allocate adequate resources, streamline regulatory processes, and promote community engagement in the planning and evaluation of infrastructure projects.

**Keywords:** Inter-sectorial Coordination, Planning, Designing, Implementing, Evaluating.

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## Background of the Research

Urban physical infrastructures play a crucial role in facilitating the effective delivery of goods and services, thereby promoting prosperity, and growth, and contributing to an enhanced quality of life (Yilema, 2019). Furthermore, a growing consensus suggests that various forms of infrastructure integration have the potential to make networks smarter, more cost-effective, and environmentally friendly (Esubalew, 2017; McLean, 2017). Despite the widespread acknowledgment that integrated infrastructure thinking can enhance system efficiency and bring societal benefits, the processes of planning, decision-making, and policy assessment persist in separate and unconnected institutional entities.

Networked physical infrastructure systems, including telecommunications, energy, transportation, water, and waste management, are essential for modern society. They support non-networked social infrastructure, such as health, education, and community centers. Strong physical infrastructure boosts sustainability, economic growth, local business competitiveness, investment climate, worker productivity, and city attraction (Timilsina et al., 2021).

Scholars characterize infrastructure integration as the collaborative efforts of institutions involved in infrastructure planning, construction, maintenance, and rehabilitation. The concept is outlined through five distinct forms found by these scholars: organizational integration, technological integration, sectorial integration, geographic integration, and social integration. It's essential to note that these domains are not mutually exclusive; they exhibit overlap, mutual influence, and integration can manifest in ways beyond the specific definitions provided (Bobylev & Jefferson, 2014; Esubalew et al., 2017; McLean, 2017; Sánchez et al., 2013).

In this study, particular emphasis will be placed on the two significant infrastructure integrations widely employed: organizational and sectorial integration within the realm of physical infrastructure. There is a consensus that extending access to infrastructure services, such as electricity, road, telecom, and water, directly benefits individuals, families, and businesses. This expansion helps reduce costs and enhance the quality of health and education services, contributing to human development at both local and national levels (Amin, 2014).

Developed nations show stronger organizational, sectorial, institutional, geographical, and technical integration compared to developing countries. Despite concerted efforts, the average state of infrastructure and its integration in Sub-Saharan Africa stays below the desired standards, posing challenges to sustainable development and hindering the region's ability to meet the growing needs of its population. Some literatures indicated that the critical challenge happening in the cities of developing countries like in Ethiopia is demolition of one physical infrastructure by the other due to non-existence or poor integration.

In Addis Ababa City, electricity interruptions are commonly associated with road construction sites. Moreover, it is clear in the study area that pedestrian roads are often dismantled to accommodate the installation of electricity, water, sewerage, or telecom infrastructures. The research student assumes that the absence of an integrated plan and implementation for service infrastructure poses potential challenges to sustainable development. Overall this study aims to examine the level of inter-sectorial integration of physical infrastructure at the planning, implementation, and evaluation stages across the four sectors (electric, road, telecom, and water sectors) in Addis Ababa City

## **Theoretical Literature Review of the Study**

### **Concepts**

Different scholars like (Alemayehu, 2015; Amin, 2014; Arts et al., 2016; McLean, 2017; Mukwaya & Mold, 2018; Rode, Terrefe, et al., 2020) stated that inter-sectorial integration involves the cooperative efforts of institutions responsible for providing infrastructure in the planning, construction, maintenance, and rehabilitation phases. McLean, 2017; identified five forms of infrastructure integration: organizational, technical, sectorial, geographic, and social. These domains are interconnected and can influence each other, with integration manifesting in ways beyond the scope of these defined categories. The subsequent elucidation details these forms of infrastructure integration. This study gives more emphasis to sectorial, integration

The research on sectorial integration advocates for collaboration not only across infrastructure sectors (such as energy, road, telecommunications, and water) but also within specific sectors. In various sectors, advancements in technology facilitate increased decentralization, leading to extensive technological system transformations and a shift away from top-down governance toward bottom-up service provision. This shift is exemplified by the proliferation of distributed generation technologies, allowing individuals to generate and utilize their own energy. However, integrating these newly emerged small and isolated entities into broader networks may pose challenges. Modern national electricity grids, for instance, were not initially designed to handle the bidirectional energy flows associated with distributed generation (Alemayehu, 2015; Mukwaya & Mold, 2018).

The second type of integration involves horizontal collaboration potential across infrastructure sectors. An example is the growing body of research examining the intersections of energy, water, and food. This research aims to conceptualize interactions across these domains as a 'nexus' of interdependencies, tensions, and trade-offs. Nexus studies view infrastructures as highly interdependent sectors, acknowledging that resources are interconnected in a complex web of relationships where resource usage and availability are mutually exclusive (Rode, Terrefe, et al., 2020a; Woldesenbet, 2020)

### **Relevant Theories**

This study investigates into the exploration of how the amalgamation of systems integration theory, stakeholder theory, network theory, and institutional theory, can furnish a comprehensive understanding of the practices and challenges related to infrastructure integration.

System integration theory emphasizes the importance of understanding the entire system, including its parts and how they work together. In the case of infrastructure integration in Addis Ababa, the system can be viewed as a complex network of interdependent systems that must be coordinated and integrated to achieve optimal performance (Alemayehu, 2015; Rajabalinejad et al., 2020; Siemiatycki, 2016)

Stakeholder theory can be used to analyze the interests and perspectives of different stakeholders in infrastructure integration, including government agencies, private companies, and communities. Stakeholder theory emphasizes the importance of engaging with all stakeholders and understanding their needs and expectations. This theory can be used to identify the challenges of stakeholder coordination in infrastructure integration in Addis Ababa.

Network theory emphasizes the importance of understanding the structure and dynamics of networks, including the relationships between nodes and how they influence each other (Bogale, 2005; Rode, Terrefe, et al., 2020a). In the context of infrastructure integration, understanding the relationships between government agencies, private companies, and communities, and how they influence infrastructure development and management.

Institutional Theory offers insights into the role of institutional arrangements and norms in shaping infrastructure integration processes. The researcher use this theory to interpret findings regarding the influence of regulations, policies, and organizational cultures on integration initiatives, as well as to understand how institutional factors facilitate or impede progress.

### **Empirical Review of the Literature**

The study by Mulugeta (2011) assesses both intra and inter-sectorial integration of urban service planning in Addis Ababa's inner city, focusing on four institutions and related departments. With sixty-eight randomly selected respondents, the study reveals a perceived poor status of integration, though some rate intra-level integration as medium. Identified factors include institutional arrangement issues, lack of a strong controlling body, governance challenges, financial constraints, property issuance problems, and frequent plan changes. The limited efforts by utility providers and the road authority, along with regulatory oversight, contribute to the overall low integration. The study emphasizes the neglected importance of integration in both academic discourse and practical considerations, recommending measures like adopting multiple trenchless technologies, utility registration, improved institutional arrangements, and private sector involvement, with further investigations into policy issues and the impact of the city grand plan on utilities and roads.

### **Integrated Physical Infrastructure Implementation in Addis Ababa**

Feyisa(2019)proposed the use of Design-Build (DB) and Design-Bid-Build (DBB) methodologies for the systematic and step-by-step planning and implementation of service-providing sectors. His research primarily addresses cooperation problems, particularly focusing on intra-organizational challenges. While the findings of his research undoubtedly contribute to its timeliness and significance, it is evident that the approach adopted in this research, involving the assessment of the experiences of four leading public sector organizations, is novel and pioneering. Consequently, the research's findings are expected to offer fresh insights into the literature on Public Management in Ethiopia and bureaucratic culture, specifically through the evaluation of the concept and practice of coordinated project management.

### **Research Gaps**

Generally, this study is prompted by a notable gap in the existing literature regarding the integration of physical infrastructure, spanning literature, policy, institutional, and methodological aspects. Despite several studies touching upon specific facets of this complex issue, a comprehensive empirical review exploring its various dimensions is lacking. Particularly in Addis Ababa City, a coherent physical infrastructure integration policy is visibly absent, leading to infrastructure vulnerability and frequent demolitions. The significance of this research lies in its potential to address these multifaceted gaps, contributing to a more holistic understanding of integrated physical infrastructure and informing effective policy decisions.

### **Research Design and Methods**

#### **Research Paradigm**

Paradigms represent the researchers' beliefs and values about the world, the way they define the world, and the way they work within the world. Regarding research, the researcher's thoughts and beliefs about any issues explored would subsequently guide their actions. In other words, the paradigm adopted directs the researcher's investigation which includes data collection and analysis procedures. Paradigm therefore has important "implications for every decision made in the research process" (Kivunja & Kuyini, 2017).

In pursuit of addressing the study objectives of exploring inter-sectorial integration for physical infrastructure provision, the choice of research philosophy becomes pivotal. While various research philosophies such as

positivism, pragmatism, and constructionism are commonly employed based on researchers' objectives, the most suitable philosophy for this qualitative study found pertinent is constructivism. What makes these three paradigms different? And why the researcher preferred constructionist paradigm?

The constructivism paradigm states the realities are multiple (Lincoln & Guba, 1989). The ultimate truth has been regarded as not existing and reality is subjective and changing (Abdullah Kamal, 2019). Proponents of constructivism also believe that “entities exist only in the minds of the persons contemplating them” (Abdullah Kamal, 2019). According to Creswell (2014), constructivism deals with the development of subjective meanings and understandings of one’s personal experiences concerning specific topics based on their social and historical background. Understandings about the world are constructed and interpreted by people (Crotty et al., 2020).

Unlike realists who advocate for specific methodologies, constructivism aligns with the qualitative nature of research, emphasizing the active role of individuals in constructing knowledge. In this context, the constructivism philosophy is deemed appropriate for unscrambling the complexities of inter-sectorial integration within the study of physical infrastructure provision sectorial integration.

Constructivism in research is a philosophy that asserts that knowledge is actively built by individuals rather than being an objective reality (Alemayehu, 2015). This approach highlights the subjective nature of reality, emphasizing that people construct their understanding based on subjective experiences and interactions within specific social and cultural contexts. In constructivist research, there is an acknowledgment of multiple perspectives and the importance of considering diverse viewpoints. The Philosophy underscores the active role of individuals in knowledge construction, the influence of social and cultural factors, and the significance of context. Constructivist researchers often use inductive reasoning and flexible methods, recognizing that understanding evolves through ongoing interactions and dialogue. Overall, constructivism in research rejects a one-size-fits-all approach to knowledge and encourages an exploration of the dynamic and varied ways in which individuals interpret and make sense of their experiences.

The qualitative approach is advantageous as it concentrates on the contexts in which individuals reside and work, allowing for a profound understanding and exploration of the beliefs, values, and motivations that underpin everyone’s behavior.

Research Design.

In determining the research design, a predominant emphasis was placed on the exploratory approach, complemented to some extent by a descriptive one. Hence, to effectively address the study's objectives, an exploratory and descriptive research design was employed. This hybrid design aims to offer a detailed and accurate depiction of the phenomenon under investigation, focusing on its characteristics, behaviors, and attributes (Omona, 2013). Specifically tailored to detail the current state and prevalence of inter-sectorial integration within specified sectors, the descriptive research design also plays a crucial role in providing a comprehensive understanding of the legal and policy landscape.

## **Research Approach**

A qualitative research approach is a methodological strategy employed in social sciences and other disciplines to investigate and understand the socioeconomic complexities human phenomena. Qualitative research is characterized by its emphasis on exploring the depth and richness of individual perspectives, contexts, and meanings, often using non-numerical data. This approach is particularly valuable when the research aims to expose subjective interpretations, cultural contexts, and the underlying meanings that individuals ascribe to their experiences. Given the research focus on investigating the scenario, challenges, institutional capacities, and legal frameworks of inter-sectorial physical infrastructure integration in Addis Ababa, this design is apt for describing the existing phenomena in these related perspectives.

## **Types and Sources of Data**

### **Types of Data**

The researcher employed qualitative data for analysis, utilizing various tools such as Key Informant Interviews (KII), Focus Group Discussions (FGD), and extended field observation.

### **Sources of Data**

To fulfill the stipulated research objectives, the researcher employed a combination of primary and secondary data sources. The primary data were gathered through Key Informant Interviews (KII) involving participants deliberately chosen from case institutions and other pertinent sectors. These included entities such as the

Addis Ababa Electric Utility, Addis Ababa Road Authority, Ethiopian Telecommunication, Addis Ababa Water and Sewerage Authority, Addis Ababa District Integrated Infrastructure Construction Work Permit and Controlling Authority, and Addis Ababa Plan Commission, as well as end users within Addis Ababa.

## **Sample Design**

### **Population and Sampling Frame**

The target population for this research consisted of senior experts, division leaders, and directors from the infrastructure-providing institutions. These individuals were selected as key informants, assuming they possessed an elevated level of knowledge related to the study's focus. Their extensive experience in each study sector provided valuable insights into the issue under examination, including comprehensive information about the sectorial integration bylaws and frameworks.

### **Sample Size Determination**

This research conducted a total of 32 Key Informant Interviews (KIIs), although the original plan was to conduct sixty interviews. It was because the data was saturated at 32 KIIs, with the following distribution per institution. The researcher initially began the Key Informant Interviews (KIIs) by conducting interviews with participants from Addis Ababa Electric Utility and Electric Power. Subsequently, the interviews extended to Addis Ababa Road Authority, Ethio Telecom, and Addis Ababa Water Sewerage Authority in a sequential manner as listed. The second phase of interviews revisited these sectors, maintaining the same order. This systematic approach was consistently applied by the researcher, leading to a saturation point in the data collection process.

In addition, three Focus Group Discussion (FGD) sessions were conducted, involving a total of thirty-one participants from various groups (forum) community committee members, electric, water, and road workers, and traffic management volunteers. Notably, the telecom sector lacked a customer representative. These sessions were aimed at eliciting their experiences concerning infrastructure provision scenarios and instances of one institution demolishing the infrastructure of another

### **Data Collection Instruments**

The researcher employed diverse data collection instruments to ensure triangulation and enhance the research's reliability and validity. These instruments included Key Informant Interviews (KII), Focus Group Discussions (FGD), and desk review.

The observation method is used to generate data. It is indeed a method of generating data rather than an instrument itself. In the context of this research, observation can take various forms such as direct observation of infrastructure sites, participant observation during stakeholder meetings or community events, or systematic observation of behaviors and interactions related to infrastructure integration processes. These observations provide valuable contextual information, identify patterns, and validate findings obtained through other data collection methods, enhancing the overall rigor and validity of the research.

### **Methods of Qualitative Data Analysis**

The data analysis process in this study involved a comprehensive qualitative approach, primarily utilizing key informant interviews (KII), focus group discussions (FGD), and observation methods. The chosen analytical methods are thematic analysis and content analysis.

Thematic Analysis, a qualitative research method, is applied to identify and interpret recurring themes or patterns within the collected data. This approach is flexible, allowing for openness to emergent themes during analysis (Creswell, 2014). Thematic Analysis is particularly relevant for exploring the complexities and nuances inherent in the integration of urban physical infrastructure in Addis Ababa City, as it is commonly employed in social sciences.

Content Analysis, another method used in this study, systematically categorizes and quantifies specific elements within the data (Creswell, 2014). It is applied to both qualitative and quantitative research, providing a more structured approach compared to Thematic Analysis. While Thematic Analysis captures the depth of

qualitative insights, Content Analysis ensures a systematic examination of data, especially relevant when exploring legal and policy frameworks.

Therefore, an inductive approach was employed to identify and derive new concepts directly from the data. This allowed for the exploration of emergent themes and novel insights that may not have been anticipated beforehand.

## **Results and Discussion**

The objective of this study is to assess the extent of inter-sectorial integration concerning physical infrastructure within Addis Ababa City, focusing on planning, implementation, and evaluation stages across four sectors. Relevant theories which support this objective among others are: systems integration theory and network theory (Singletary et al., 2003). The first theory posits that urban infrastructure should be viewed as an interconnected system, where the effectiveness of one sector is dependent on the functionality of others. Research applying this theory emphasizes the importance of coordinated planning and implementation across sectors to achieve overall urban development goals (Espada et al., 2015). In this regard, successful planning, execution, and assessment of infrastructure projects necessitate seamless collaboration among the transportation, telecom, water supply, and energy sectors.

In the context of urban infrastructure, network theory, the significance of relationships and interactions among different actors is involved in planning and implementation. Research based on this theory may explore the role of various stakeholders, such as government agencies, private sector entities, and community organizations, in promoting or hindering integration efforts (Espada et al., 2015; Singletary et al., 2003).

When we look into theoretical frameworks and empirical findings to the context of Addis Ababa City, research by Bannazadeh et al. (2011) specifically focused on infrastructure development in Addis Ababa City, reveals that projects characterized by comprehensive inter-sectorial planning and collaboration exhibited higher levels of success and resilience to challenges such as rapid urbanization and resource constraints. This empirical study highlights the relevance of inter-sectorial integration in the specific context of Addis Ababa City.

Even though there are various internal and external challenges particularly in management sides, the integrated infrastructure developments in local areas such as the cobblestoned road expansions supported by road side lights have brought about positive economic, social and environmental changes (Kumar & Meshram, 2022).

This study explains that level of inter-sectorial integration in physical infrastructure focusing on its stages. At the planning stage, stakeholders can evaluate the extent to which different sectors contribute to infrastructure development plans and whether there is sufficient coordination among them. During implementation, close collaboration between sectors is essential to ensure that projects are executed efficiently and in line with established plans. Finally, evaluation allows for the assessment of how well different sectors worked together to achieve the desired outcomes and identify areas for improvement (Guidotti et al., 2019).

There is a framework document prepared in 2020 by the Federal Infrastructure Integration and Development Agency of Ethiopia stating how infrastructure-providing institutions work in coordination from the planning to the implementation stage. They should plan in adherence and alignment with the broader strategic framework prepared by the coordination of the institutions. The thorough coordination between these entities guarantees the all-in-one integration of their infrastructure entities into the comprehensive plan, emphasizing a synergistic approach. As executive bodies craft their infrastructure plans, the foundational blueprint consistently focuses on the intricate details of the road infrastructure, fostering a cohesive and harmonized development strategy. This strategic alignment optimizes resource utilization and strengthens the sustainable growth and resilience of the overall infrastructure network (FIIDCA Ethiopia, 2020).

According to the framework document, infrastructure-providing institutions should take the road network as a framework for their infrastructure provisions. In support of this, road networks act as the framework for the installation of utility service infrastructures like water and electricity lines. They should plan various infrastructure provisions in advance with the consultancy of the road authority and should get approval from Addis Ababa City Infrastructure Coordination and Construction Permit. Unless the physical infrastructure institutions get a go-ahead confirmation, they cannot implement their provision independently. Moreover, they should formally communicate with the road authority if their infrastructure development has damage to the road infrastructures.

It is shown that in Addis Ababa institutions involved in infrastructure provision has a history of independent operations in development. This situation is exposed by scholars who assert that the city's infrastructure development has primarily occurred without comprehensive collaboration among institutions, resulting in the demolition of developments (Rode, Terrefe, et al., 2020a; UN Ohrls, 2015; Yalew & Changgang, 2020). Consequently, instances of one institution causing damage to another's infrastructure is frequent, resulting in unnecessary economic losses for maintenance and reconstruction. The absence of implementation with a legal framework exacerbated the issue, leaving no clear mandate to hold any institution responsible and accountable for such losses.

In the following, scenario of infrastructure integration among the case sectors concurrent discussion of the results takes place at various stages, from planning to evaluation.

The complex challenges persist in managing infrastructure planning at the national level, primarily stemming from limited coordination abilities across comprehensive project aspects such as planning, financing, and preparedness (FIIDCA Ethiopia, 2020; Jayasinghe et al., 2023a).

However, in practice, some of them like the road sector might not consult with others in new road development or maintaining degraded ones, which causes infrastructure damage in other sectors. Three distinctive stages have been delineated for these institutions' planning of autonomous infrastructures. In support of the KII, the Federal Integrated Infrastructure Development Coordinating Agency manual developed in 2014 put how the infrastructure-providing institutions come to a point and integrate from the planning to implementation stages (Ethiopian House Federation, 2014).

The infrastructure integration manual crafted by Federal Integrated Infrastructure Development Coordinating Agency of Ethiopia (Ethiopian House Federation, 2014), the infrastructure integration framework in (AAICWPCA), requires that during the final design phase, a better design has been developed.

When dealing with an operational road or rail, the preparation of a sufficient corridor for utility lines must align with the coordination standards and guidelines issued by the Federal Integrated Infrastructure Coordinating Agency and adopted by Addis Ababa City Infrastructure Coordination and Construction Permit Authority (Assefa et al., 2018; EiABC, 2016; Seife, 2019).

The researches on this matter clarifies that road networks serve as crucial frameworks, acting as reference points for other utility service providers in devising their own utility line plans (Ayalneh, 2012; Grogan & De Weck, 2013). Furthermore, these entities bear the responsibility of ensuring that their infrastructures consider the future road projects during their operations. Prompt communication of information related to agreements and subsequent field reports is essential and should be directed to the Federal Integrated Infrastructure Coordinating Agency.

The coordination process involves various essential stages (Deen-Swarray et al., 2014; Ethiopian House Federation, 2014; Ine, 2017; Thorpe, 1998). Initially, the authority lays the groundwork by preparing the Basic Planning Framework and defining the scope, establishing the foundation for a comprehensive planning framework.

The effective prioritization during the planning phase (Ethiopian House Federation, 2014). Additionally, it takes the lead in formulating guidelines and regulations crucial for the seamless implementation of the infrastructure plan.

The case Sectors' show promoting towards an integrated infrastructure system and coordination (Yilema, 2019). Collaboratively, infrastructure institutions develop and approve their plans in conjunction with the Federal Integrated Infrastructure Coordinating Agency, aligning projects accordingly (Ethiopian House Federation, 2014).

The research indicates that the integration of infrastructure providing institutions for coordinated infrastructure provision contributes to environmentally friendly physical infrastructure, achieving lower costs and optimal quality. This, in turn, plays a vital role in fostering sustainable development in urban areas (Ansell & Gash, 2007; Arts et al., 2016; Rode, Terrefe, et al., 2020a).

This chapter delves into the dynamics of urban infrastructures in Addis Ababa, focusing on the integration of institutions responsible for planning and implementing key elements such as roads, electricity, water, and telecom services. Employing a mix of Key Informant Interviews (KIIs), Focus Group Discussions (FGDs), and observations, the analysis explores inter- sectorial integration.

Drawing from municipal government bodies in Addis Ababa, including the Road, Electric Utility, Ethio telecom, and Water and Sewerage authorities, data collection involved KIIs with officials, experts, and insights from community representatives. The subsequent discussion encompasses a thorough examination of integration across different sectors, utilizing KIIs, FGDs, and observational data.

The institutional integration for infrastructure provision is a focal point, highlighting the establishment of clear frameworks and coordination mechanisms. Mandated to align plans with the road network, infrastructure institutions ensure cohesive and harmonized development. The significance of formal communication and collaboration, particularly concerning infrastructure development affecting road infrastructure, is underscored.

The integration theme extends across various stages of infrastructure development, emphasizing planning, designing, and construction. A legal framework established in 2012 addresses independent operations and potential damage, while the Integrated Urban Infrastructure Strategy adopted in 2016 facilitates integrated planning.

Exploring the role of stakeholders, the focus shifts to the responsibilities of the Federal Integrated Infrastructure Coordination Agency in preparing national plans, providing support, and evaluating work programs. Collaborative efforts with infrastructure institutions and stakeholders are detailed, outlining specific strategies applied at various stages of planning, designing, and construction.

In conclusion, the chapter emphasizes the continuous need for institutional capacity development to manage long-term, medium-term, and short-term planning effectively. The collaborative nature of infrastructure development, including stakeholder involvement and efficient coordination, remains crucial. The ongoing efforts by the Federal Integrated Infrastructure Coordination Agency and infrastructure institutions contribute to shaping a cohesive and integrated urban infrastructure system in Addis Ababa.

It is believed that after implementation stage monitoring and evaluation should be performed in an integrated manner. Delving into the performance evaluation of AAWSA sector, interviews with leaders, professionals, and community representatives provide intricate insights about physical infrastructure institutions. As the respondents reflected, in the initial stages of the fiscal year, each institution diligently submits its plans to the city's infrastructure coordinator and supervisory authority. However, the implementation phase reveals a significant challenge marked by a lack of comprehensive planning and coordinated efforts. This deficiency results in substantial damage to the extensive infrastructure assets, whether situated above or below ground, accumulated over the years. In support of this, studies show that infrastructure damage due to poor implementation is rooted from the poor coordination of the institutions responsible for implementation during planning and design stages (Espada et al., 2015; Proag, 2020).

Compounding of the issue is due to the fact that the absence of a robust accountability system to systematically address these challenges (Seife 2019). The interviews highlight a prevailing practice among respondents, wherein clear and detailed performance evaluations are not conducted on a quarterly, semi-annual, or fiscal year summary basis. Furthermore, there is a noticeable scarcity of standardized criteria for conducting these evaluations.

The matter of monitoring and evaluation should be necessary after development stages. However, the emphasis given by AAICWPCA and the physical infrastructure instructions under it is said to be extremely poor. Let us see points reported from three sectors: AAICWPCA, EEP and Ethio Telecom:

With the milieu of physical infrastructure integration, Addis Ababa Integrated Infrastructure Construction Work Permit and Controlling Authority (AAICWPCA) had been posed about the status of performance evaluation. Emphasizing prevention through research and planning, AAICWPCA reports that its focus is on minimizing the chances of damage occurrence. As it said, "As a government institution, we constantly evaluate and propose changes within our authority, recognizing the need for legal frameworks to enhance accountability and responsibility. While challenges beyond our control exist, our top management is trusted in infrastructure provision. Fast and close monitoring ensures timely corrections, and decisions are evaluated and implemented efficiently".



As per AAICWPCA, coordination is central to its efforts, with a focus on identifying key infrastructure providers and aligning their plans with the city's master plan. Standards for construction prevent instances where one entity constructs infrastructure only to face dismantling by another. The process involves a thorough evaluation, granting construction permits only when plans align. Technical committees monitor progress to address issues and ensure swift adherence to standards.

As observations had been undertaken, and the searches of evaluation and monitoring efforts from monthly and annual reports considered, the fact is behind the above points. This is to say the evaluation and monitoring practice is almost zero.

Ethiopian Electric Power also emphasizes paramount importance physical infrastructure coordination in Addis Ababa City Administration. It evaluated that the lack of coordination among physical infrastructure service providing institutions has led to power cuts and other issues, causing dissatisfaction in the community. One of the respondents in EEP highlights that "The fundamental problem is the lack of coordination between EEP and other sectors, resulting in inefficiencies and interruptions in service".

As observations have been undertaken, and the searches from monthly and annual reports, evaluation and monitoring efforts are not documented. This shows that the EEP has no kind of KPIs used for evaluating and monitoring the coordination status of physical infrastructure service providing institutions.

Ethio Telecom's report about monitoring and evaluation of coordinated performances among physical infrastructure service providing institutions does not show the prominent emphasis given by the sector. It reports what is not happening on the ground "Over the past 2 to 3 years, the four institutions responsible for water, road, telecommunications, and electricity services have made efforts to coordinate construction works in the city. They develop plans, create a mutual understanding, and evaluate performance quarterly. Emphasis is placed on turning plans into actionable work and obtaining necessary permits before initiating construction to ensure effective coordination".

The observations undertaken confirm that there is no evidence showing the monitoring and evaluation efforts using standardized KPIs. And the above reported quarterly M&E efforts are not documented as well.

The investigation uncovers the establishment of an authority office for coordination, yet evidence indicating coordinated performance across the mentioned sectors is conspicuously absent. Each institution has no key performance indicators showing each stage of planning, design, implementation, and evaluation. In summary, the research reveals a pervasive gap in the performance assessment landscape across these critical sectors, emphasizing the need for a more comprehensive and standardized approach to evaluation and coordination.

## **Conclusions and Recommendations**

The findings of this study underscore the critical need for enhanced inter-sectorial collaboration and integration in the planning, implementation, and evaluation of infrastructure projects within Addis Ababa city. Across electric, road, telecom, and water sectors, a lack of organized collaboration has been identified as a significant obstacle to efficient infrastructure development. Fragmented planning processes, inadequate coordination between sectors, budget constraints, and capacity limitations have resulted in disjointed infrastructure initiatives that fail to address the interconnectedness of urban systems or adequately meet the needs of local communities. Furthermore, bureaucratic hurdles and insufficient stakeholder engagement have compounded these challenges, exacerbating the socio-economic, environmental, and political impacts of inadequate infrastructure integration.

Addressing these challenges requires a comprehensive approach that prioritizes improved coordination among government sectors, bolstering institutional capacity, allocating sufficient resources, streamlining regulatory procedures, and fostering community involvement in infrastructure planning and evaluation processes. By overcoming these barriers and fostering greater collaboration, Addis Ababa can enhance the effectiveness and sustainability of its infrastructure development efforts, thereby promoting inclusive growth, environmental stewardship, and socio-economic well-being across the city.

## **Future Research Direction**

Addis Ababa, Ethiopia's capital is facing disintegrated infrastructure due to inadequate coordination among institutions. The study does not fully address economic, social, environmental, and political impacts that can be generated by the lack infrastructure integration. Therefore, further research is needed to address these issues.

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# **An Examination of the Application of Corporate Governance Principles in the Global Business Sector of Mauritius**

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## **Abstract**

The need for the enshrinement of principles of corporate governance in the legal framework on global business sector of Mauritius has become necessary given the economic importance this sector has gained since the last two decades. This article conducted an assessment of the said legal framework using a legal doctrinal methodology by assessing the principle legislation regulating this sector which is the Financial Services Act 2007 and other related soft laws. The article adopts a doctrinal legal approach consisting of the analysis of legal provisions in view of understanding their application. The relevant sections of these laws are analysed to investigate the extent to which corporate governance principles were enshrined therein. It was found that the legal framework on global business in general critically lacked the infusion of essential principles of corporate governance as provided for by the 2016 Code of Corporate Governance of Mauritius.

**Keywords:** Mauritius; Corporate Governance; Global Business; Principles; Code of Corporate Governance.

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## **Global Business Sector of Mauritius - An Overview**

Located in the Indian Ocean, Mauritius is a key global business hub. It has one of sub-Saharan Africa's most transparent and stable economies. The prospering economy of Mauritius, which is sandwiched between Asia and Africa, is primarily as a consequence of its political and socio-economic stability, together with good governance and a variety of incentives to encourage investment. It is well known that Mauritius is a fantastic location for conducting business. International organizations such as the Organization for Economic Cooperation and Development (OECD), the Financial Action Task Force (FATF), and the World Bank (WB) have recognized the nation's implementation of best business practices and sustainable development strategies (E Lee, 2016).

The Island nation has started a fresh reform initiative supported by an open economics ideology. The goal is to increase Mauritius' appeal to foreign investors, establish it as the financial Centre of the African continent, and position it as a prime location for business and investment in Africa, the Middle East, and Asia. The establishment of the international business sector in Mauritius at the beginning of the 1990s was done in order to draw in foreign capital, and it has since grown to become one of the foundations of the modern economy. The initial framework established by the Mauritius Offshore Business Activities Act 1992 permitted offshore corporations and trusts to engage in offshore business activities including, but not limited to, offshore trading, offshore fund management, offshore banking, international consultancy services, and international financial services.

With the introduction of the Financial Services Act 2007 (the Act), the regulatory environment was modernized in 2007 with the goal of increasing the jurisdiction's appeal to foreign investors and the convenience of doing business in Mauritius. Companies with either a Category 1 Global Business License (GBL1) or a Category 2 Global Business License (GBL2) at the time were authorized to execute investments. Due to the GBL1 license holder's tax residency in Mauritius and ability to take advantage of the growing network of double taxation agreements, this license provided investors with an effective vehicle for tax structuring and planning. The owner of a GBL1 license must apply for one or more country-specific tax residency certificates or a general tax residence certificate issued by the Mauritius Revenue Authority in order to take advantage of those tax benefits. The GBL1 license had a number of benefits, including the elimination of inheritance tax, withholding tax on certain kinds of income (such as dividends, interests, and royalties from overseas sources), and capital gains tax.

An effective maximum rate of 3% on its chargeable income in Mauritius was applicable to a GBL1 licensee with a deemed foreign tax credit of up to 80%. Under Mauritian law, a GBL1 licensee was typically organised as a company, trust, or limited partnership and was permitted to engage in any type of commercial

activity (such as asset management, credit finance, distribution of financial products, factoring, treasury management, etc.), so long as it was managed and controlled from Mauritius. Before the change in 2018, the Financial Services Commission (the FSC) predicated its determination of the "management and control" test on the following criteria: the selection of at least two resident directors to the board, and the attendance of these directors at all board meetings; the establishment and upkeep of a primary bank account in Mauritius; maintaining financial records in Mauritius; the examination of Mauritius's financial statements; displaying economic substance in Mauritius by meeting at least one of the following requirements: having office space in Mauritius; employing at least one person there; holding assets worth at least \$100,000 there; having the GBL1 licensee's shares listed on a local securities exchange; meeting minimum annual spending requirements, depending on the activity carried out; or including a provision requiring arbitration in Mauritius in its founding documents. A GBL1 licensee was also required to be managed at all times by a management business that was properly licensed by the FSC.

The GBL2 license was more flexible than the GBL1 license because it did not do business in Mauritius and was therefore excluded from Mauritian tax implications. Another distinction was that a GBL2 licensee was only allowed to name one director, who might be either an individual or a business and need not be a resident. The GBL2 license was typically used for non-financial activity, storing assets such as intellectual property, or protecting wealth. It was forbidden for someone who held a GBL2 license to: (a) engage in banking activities, financial services, collective investment schemes, or trusteeship services; (b) serve as a professional functionary of a collective investment scheme; or (c) offer registered office space as well as nominee, directorship, and secretarial services. A registered agent with an FSC license managed a GBL2 licensee. The GBL2 licensee received a small number of services from the registered agent, including submitting returns and communicating with authorities (including the FSC).

The international business sector saw major modifications as a result of the Finance (Miscellaneous Provisions) Act 2018. The GBL2 license was eliminated and replaced by a new regime for approved corporations (AC), and the GBL1 license was re-designated as a global business license (the GBC license). Holders of GBL1 and GBL2 licenses issued on or before 16 October 2017 were automatically enrolled by the Act until 30 June 2021, after which GBL1 licenses were presumed to be GBC licenses, according to the transitional rules between the pre-2018 and post-2018 regimes. However, GBL2 licenses expired on June 30, 2021, and owners had to request for a GBC license or authorization to act as an AC by that date. Similar to this, GBL1 licenses that were granted after October 16, 2017, were valid until December 31, 2018, at which point they became GBC licenses. After the December 2018 deadline passed, GBL2 licenses that had been issued after that date lapsed and were either relicensed as GBC licenses or ACs.

With total assets at USD719.6 billion, or around 53 times the worth of the Mauritian GDP, Mauritius has a sizable GBC sector. The GBC sector's share of Mauritius' GDP was expected to be 5.8% in 2019 and to have grown by 3.8% year over year. Around 6,000 people were employed directly in the GBC Sector as of December 2019. While the global business sector of Mauritius undeniably plays a crucial role towards the economy, it can also become a breeding ground for financial crimes and corporate collapses. Indeed, a number of significant company failures have recently harmed the global business sector and Mauritius has been no exception to this with various management companies operating in the global business sector have been forced to close down. There has always been the concern that Mauritius' global business sector may be chosen by international business actors because of its reputation for being a low cost, tax treaty jurisdiction (Buchanan, 2004).

Additional steps to promote Mauritius as a jurisdiction of substance were added in the Budget 2017/2018, following the tendency of international tax planning towards "economic substance" in addition to "legal substance." GBC must now meet two of the six requirements set forth by the Mauritius Financial Services Commission, up from the prior need of just one, making them subject to stricter scrutiny. This is a development that is good. In July 2017, Mauritius ratified the most current Multilateral Instrument (MLI) of the OECD, which was a logical extension of the Base

Erosion and Profit Shifting (BEPS) proposals. This move demonstrates Mauritius' steadfast commitment to upholding international standards and preventing abuses such as looking for a tax treaty jurisdiction with a low cost (Buchanan, 2004).

In spite of all the positive measures taken so far, it can be argued that the principles of corporate governance have not yet been adequately enshrined in the legal and normative frameworks that regulate the global business sector in Mauritius. Principles of corporate governance can act as a barrier against corporate collapses with key components such as the board, audit systems, duties and powers of directors, risk management and internal controls, integrity reporting as well as relations with shareholders and other key

stakeholders (Armstrong et al. 2010). Against this backdrop, this article attempts at reviewing the legal framework on global business in Mauritius with the primary aim of assessing the degree and extent to which the 8 principles of corporate governance in Mauritius, as per the 2016 Code of Corporate Governance (the 2016 Code), are infused and enshrined in the laws regulating global business. It is argued that enshrining the principles of corporate governance in the laws governing global business sector in Mauritius would enhance their enforceability and justiciability, somehow legally imposing on companies in this sector to mandatorily observe these principles. The following section provides for an overview of the principles of corporate governance in Mauritius before embarking on the analysis regarding the enshrinement of the principles in the legal framework on corporate governance.

### **A Brief Introduction to the 2016 Code of Corporate Governance.**

A Committee on Corporate Governance was established in Mauritius in September 2004. The main objective of the aforementioned committee was to spread awareness of corporate governance among businesses and organizations in both the public and private sectors. Transparency, accountability, meritocracy, fairness, management principles, and the fight against corruption were the major working criteria of the committee. In response to the World Bank's Report on the Observance of Standards and Codes for Corporate Governance from October 2002, which recommended the adoption of a Code of Corporate Governance for Mauritius, the committee's work resulted in the creation of a Code of Corporate Governance for Mauritius. Mervyn King, the author of the King Reports on Corporate Governance for South Africa, participated in the publication of the first Code for Mauritius in October 2003 following national consultations with diverse stakeholders (HJ van Vuuren, 2020)

The 'comply or explain' approach served as the foundation for the 2004 Code. In essence, this concept states that an alternative to the Code may be approved or put into practice as long as it results in excellent corporate governance and transparency. The following were some of the Code's.

Salient characteristics: (1) The CEO's and Chair's roles must be distinct; (2) There must be at least two independent and two executive directors; (3) An Audit Committee and a Corporate Governance Committee are necessary; (4) Communication and disclosure are stressed; and (5) Independent auditors. The 2004 Code's primary flaw seems to be its application level among its followers. In fact, according to a 2009 survey by the World Bank, just 36% of State Owned Enterprises and businesses listed on the Development and Enterprise Market were actually putting the Code's tenets into practice. The 2008 global financial crisis and the numerous corporate failures in Mauritius, including the BAI and the Bramer Bank, had fueled the need to amend the Code in 2016.

The 2016 Code provides for eight principles namely governance structure, structure of board and its committees, director appointment procedures, directors duties, remuneration and performance, risk governance and internal control, reporting with integrity, audit and relations with shareholders and other key stakeholders. It applies to public interest entities, public sector organizations and other companies of Mauritius which shows that it has a wide reach in terms of the types of companies that it covers. The 2016 Code has adopted a principle-based approach in contrast with a rules-based approach. According to the National Committee on Corporate Governance (2016), the legal system in Mauritius is mature and well-developed, and it is mostly based on rules. Codes differ from other legal provisions in that they have a principles-based strategy rather than a rules-based one. An organization can implement processes and procedures that are tailored to its particular needs using a principles-based approach, but they must then justify how they have applied each concept.

The principles in this Code have been written in such a way that organizations must report on how they have implemented each one. The disclosure of corporate governance procedures by organizations is a key component of the suggested corporate governance strategy. Reporting on corporate governance practices to shareholders and other stakeholders is a necessary part of putting the principles into effect, and the website and annual report are the best places to do this. As a consequence of considerable consultation, the 2016 Code strives to avoid adopting a prescriptive or mandatory approach to governance procedures that places a heavy emphasis on compliance requirements. It is not advised to take a "tick-the-box" approach to reporting on governance.

The Code uses a "apply-and-explain" technique based on a philosophy of application and disclosure. The first corporate governance document to use this new strategy is the Mauritius Code of Corporate Governance. This is a change from the 'comply-or-explain' strategy connected with the UK's Cadbury Report (1992) and the 'apply-or-explain' strategy linked with the Dutch Tabaksblat Code of Corporate Governance (2004) and the King III Report in South Africa (2009). All public interest organizations and other organizations that are



obligated to report on corporate governance must adhere to the Code's entire set of tenets and detail how they have done so in their annual reports. When there are contradictions or conflicts, however, the law and the regulatory framework supersede the Code. The Code consists of eight concepts on just two pages, not a rigorous set of regulations. The Code's fundamental tenets are its principles. The application of each principle should be determined by each Board of Directors.

The annual report's explanation of how a company has applied the principles should be the Board's main concern. The following suggestions are made to encourage the annual report's authors to think about their answers: Has the annual report and/or website covered all the important aspects of corporate governance? Are the organization's corporate governance practices in line with the Code's guiding principles? Are the corporate governance practices of the organization helping to achieve and add value to the organization's goals? But the annual report must give a justification in cases where there is a significant departure from any advice in this Code. Individual conditions, in particular the organization's size, sector, complexity, and the types of risks and challenges it faces, may have an impact on the organization's explanations. While shareholders and regulators are perfectly within their rights to question an organization's justifications if they are not persuasive, these justifications shouldn't be assessed in a mechanical or box-ticking manner, and deviations from the advice shouldn't always be considered breaches.

A strong capital market requires active shareholders and important stakeholders. In order to help the apply-and-explain process, shareholders and stakeholders should take care while responding to the governance report in the annual report. They must express their opinions to the organization, and both parties must be willing to debate the issue. The success of the Mauritian corporate governance system depends on the Boards of Organizations' and other suitable stakeholders' satisfactorily engaging with each other. The duty for ensuring that apply-and-explain remains a viable alternative to a rules-based system rests with boards, shareholders, and other stakeholders.

### **The Legal and Regulatory Framework on Global Business in Mauritius**

The Financial Services Act 2007 (FSA) is the main regulatory framework governing the global business sector. The FSC, in turn, is responsible for the licensing of Management Companies (MCs) which are service providers acting as intermediaries between their clients and the FSC. A company applying for a Global Business License must pass the test of business being conducted outside Mauritius. An application has to be submitted to the FSC through a Management Company of the choice of the applicant. The FSC has developed the Guide to Global Business to provide for guidance on application for licenses. MCs act as service providers and intermediaries between the clients and the FSC as per Section 77 of the FSA 2007. They can also act as corporate or qualified trustee as per provisions of the Trusts Act 2001. They operate based on the provisions of the FSC Guidance Notes for Management Companies.

As for the legal framework, global business companies, more specifically the management companies, are regulated by the FSA. The FSC has a series of rules, regulations, guides, codes and circular letters which are also part of the law regarding global business. Similar to the insurance sectors, while acts, regulations and rules are binding in nature, others would be non-binding and mainly serving the purpose of guidance. It should be highlighted that, similar to any type of company, MCs are also regulated by the Companies Act 2001. However, the FSA 2007 specifically regulates the global business sector and thus it is legal framework which will be under review.

### **Critical Assessment of the Degree of Enshrinement of the Principles of the 2016 Code in the Legal and Regulatory Framework on Global Business**

The following section will now review the above explained framework to assess the degree of enshrinement of the 2016 Code's principles regarding global business. The methodology applied is premised on a principle-by-principle approach. Relevant provisions of the legal and regulatory framework on global business are analyzed to eventually feed onto the recommendations. A dual approach will be employed since the legal and regulatory framework on global business consist of a binding framework consisting of acts, regulations and rules and a non-binding framework involving codes, guidelines and guidance notes from the FSC.

#### **Principle 1 – Governance Structure**

Part X of the FSA 2007 regulates the global business sector through 11 sections. As stated above, the MCs are the main actors in this sector. It is noted with concern that the FSA 2007 makes no mention of the need to have an effective board and for the adoption of a board charter, code of ethics, organizational charts and statement of responsibilities. At this stage it should be highlighted that even the soft laws on global business make no mention of the various components of Principle 1 as well.

Global business is no doubt an important economic pillar of the country. However, it is also a sphere which has a dark side breeding illegal financial transactions sometimes linked to serious crimes. It is a major drawback that the legal framework on global business does not provide for an effective board, a board charter and code of ethics. Ethical considerations are vital for responsible offshoring and outsourcing as very often global business activities can be legal but not ethical as was the case with Hong Kong's global business companies in 2016 (S Datta et al. 2015). This explains the need for a robust board governance structure and a pressing need for principle 1 of the 2016 Code to be embedded in the FSA 2007.

As mentioned above, review of the non-binding framework on global business has shown that governance structure and its components are not adequately covered in the soft laws as well. Taking into consideration that soft laws are there to provide for guidance, it is a matter of concern that such important components have not been adequately catered for by the soft laws even on the basis of persuasive value.

### **Principle 2 – The Structure of the Board and its Committees**

Similar to principle 1 on governance structure, Part X of the FSA provides for no information on board structure, size and composition of the MCs. Essential concepts such as independent directors and company secretary and board diversity in terms of women's representation as directors are not embedded in the legal framework on global business. Likewise, even the non-binding framework on global business does not make any specific reference to board structure and essential aspects such as independent directors and board diversity.

The board is the mind and heart of any global business company. It is imperative for it to be democratic, adequately represented, gender diverse with a dose of independence since different sets of skills and backgrounds of directors may be required while engaging in global business partners from various countries with diverging business culture. Since provisions of the FSA 2007 on global business are devoid of any component of board structure, GBC boards can be constituted at the free will of people responsible for the MCs and the clients. This can be a dangerous proposition as very often it results in boards without any system of checks and balances in the best interest of the company and shareholders. Again, similarly to Principle 1, it is a matter of apprehension that such significant components have not been even mentioned for by the soft laws even on the basis of persuasive value or as a means for guidance.

### **Principle 3 – Director Appointment Procedures**

The FSA, which is the only binding legislation directly regulating global business does not provide for any provision related to the appointment procedures of directors. Section 71 (3) (b) of the FSA 2007 only mentions that the client needs to have at least 2 directors resident in Mauritius and of sufficient caliber to exercise independence of mind and judgment.

Directors have a massive role to play in ensuring both the good health of MCs and global business sector in general which, for instance, may not be guaranteed by a corporation as a director. They are indeed the bridge between the clients and their business activities in Mauritius as regulated by the

FSC. There is a major gap in the law given the fact that no single provision in the FSA 2007 regulates the appointment of directors. This allows global business directors too much discretion and exclusively profit-oriented to the detriment of good corporate governance practices. Such a situation warrants the inclusion of Principle 3 in the FSA 2007. The FSC regulatory framework, as reviewed above, also falls short of regulating the appointment of directors.

The procedural aspects of appointment of directors of MCs is noticeably absent from the soft law framework on global business. Yet, appointment of MCs directors should be based on strict criteria adhering to best practices. While different MCs may be of a different nature based on their operations, the soft law framework should have at least provided for basic procedural indications on appointment of directors for MCs. This would have ensured a basic degree of consistency.

#### **Principle 4 – Directors duties, remuneration and performance**

The FSA 2007 has no substantive provisions on director duties, remuneration and performance. The FSC Guidelines for Management Companies makes references to the Companies Act while reminding directors of MCs to discharge their duties with honesty, in good faith and in the best interest of the company. Directors of MCs are also required to possess necessary and sufficient skill and knowledge to carry out their directorship duties. Paragraph 4.3 of the Code of Business Conduct 2015 provides for the concept of conflict of interest encouraging licensees to avoid situations of conflicts of interest and emphasize on the fair treatment of customers in such conflicting situations. It is only the FSC Guidelines for Management Companies that directly imposes a soft obligation on directors to not unfairly place their interest above that of the client.

It is mandatory to take into account the nature of global business when discussing the role, duties and performance of directors. There is a certain level of opacity in some cases when it comes to MCs. Even if the general provisions on these aspects from the Companies Act 2001 are applicable to directors of MCs, it is essential for the standards applicable to directors' duties and performance to be embedded in the FSA 2007 to enhance legal accountability by taking into account the nature of global business. It means that standards such as due diligence, skill, care and good faith should be highly contextualized and explicitly provided for in the FSA 2007.

The FSC Guidelines for Management Companies lightly touch on the concept of conflict of interest as explained above by imposing a soft duty on directors of MCs. The health of an MC and by extension of global business in general is dependent on the way conflicts of interest are managed especially in relation to directors. It is therefore too critical a matter for it to be provided for in the soft law framework on global business which remains non-binding in nature.

#### **Principle 5 - Risk Governance and Internal control**

Risk governance and internal control are not explicitly provided for by the FSA 2007 regulating global business and management companies in Mauritius. Paragraph 4.7 of the Code on Business Conduct 2015 entitled financial resources provides that licensees must implement appropriate risk management policies in their business. There is an additional obligation under paragraph 4.8 according to which licensees are required to maintain adequate internal controls while managing their business in a responsible and sustainable manner. In line with the necessity of governing risks, the FSC Guidelines for Management Companies proposes to MC to adopt the know your client principle and to verify the background of every potential client before entering into business relationship. This principle is reiterated in the FSC Guide to Global Business 2012 (2012, 7). There is equally the proposition of obtaining references about the potential client on which the MC can rely on.

Risk governance and internal control are arguably too cardinal to be merely softly regulated by the soft and non-binding directive principles of the FSC. Indeed, managing risks and internal controls in and by MCs are determinant of the success of global business since there is a geographical implication of business activities. As stated above, these aspects are only visible in the guide and guidelines of the FSC. These soft law principles do not have legally binding force and cannot bind MCs to ensure that there is proper risk management and internal control.

While the FSC Guidelines for Management Companies and the FSC Guide to Global Business do provide for guidance with regard to risk management and internal control, again their non-binding nature appears as an impediment towards enforceability. Very often, it is only after the collapse of an MC that it is discovered that guidelines were not being followed. This acts more as a precautionary measure rather than a pre-emptive and preventive one which is more efficient as approach due to high uncertainties in global business.

#### **Principle 6 – Reporting with integrity**

No substantive and legally binding provisions are available under the FSA 2007 regarding the critical issue of reporting with integrity. The Code of Business Conduct 2015 of the FSC has provided for business integrity as one of its nine guiding principles. Accordingly, licensees are required to observe acceptable standards of honesty, integrity and fairness. There is also the soft duty to record fairly and accurately all business transactions carried out. Paragraph 14 of the FSC Guidelines to Management Companies only provides for the need to report to the FSC on financial and accounting matters in a timely manner.

The concept of reporting with integrity is critical to the global business sector failing which possibilities of money laundering are bred to eventually make MCs collapse (Ramsay and Head, 1997). In addition, lack of

binding framework on reporting and its consequences can be severely sanctioned by international financial regulations. The present framework only provides for integrity in reporting in soft terms in non-binding guidelines as discussed above. This affects the degree of accountability by which global business sector actors are supposed to operate, especially given the nature of the sector (Y Gowry et al. 2023).

The main argument under this section is that critical aspects such as reporting with honesty, integrity and in a timely manner are vital standards that cannot only be provided in the soft law framework which is non-binding. Indeed, Fung contends that 'building a culture of transparency is a fundamental first step to achieving trust'. Since trust between various global business partners is essential and determining, it must be provided for in a legally binding and enforceable framework (Fung, 2014).

### **Principle 7 – Audit**

The essential process of auditing is not catered for by the FSA 2007 for MCs acting as intermediaries between global business clients and the FSC. It is only the FSC Guidelines for Management Companies provide that MC are required to prepare and submit to the FSC audited annual accounts in a timely manner. The FSC Guide to Global Business also provides that GBC 1 must prepare audited financial statements as reiterated in the FSC Circular Letter CL201207.

It is argued that, given the nature of global business sector, its audit procedures and requirements ought to be more stringent and explicitly provided by the law since MCs have the obligations to deliver value to their customers (T Iijima, 2007). It is evident that auditing standards are only set in non-binding instruments such as guides or circular letter of the FSC. This heavily hampers the process of auditing as it is devoid of legal standards and sanctions that should accompany them in cases of non-compliance.

While the non-binding soft law on auditing processes is quite elaborate as presented in FSC Guidelines for Management Companies and FSC Guide to Global Business, it is argued that they have more of an administrative force rather than a legal one. Consequently non-compliance with such a framework results into administrative sanctions rather than legal ones. It is contended that this principle of corporate governance in relation to global business can only be given force of law by enshrining it in the hard law framework governing MCs and global business.

### **Principle 8 – Relations with the Shareholders and other key Stakeholders**

The relationships that MCs must have with shareholders and stakeholders are not delineated and defined in the FSA 2007. The Code of Business Conduct 2015 of the FSC provides for the principle of skill, care and diligence which are standards by which licensees of the FSC must act while dealing with customers and other stakeholders. The FSC Guidelines for Management Companies also provide for the threshold with which clients' money and assets must be handled in paragraph 4.

As stated above, the FSA 2007 does not provide for substantive provisions on the relationship between MCs and its shareholders and stakeholders. Yet, shareholders and other stakeholders of an MC may have a distinct and essential role to play in the health of the MCs especially with the possibility of the board consisting of foreign directors who may not be versed with the corporate culture domestically.

Even if the soft law framework on global business does provide for the soft requirement of principle of skill, care and diligence while dealing with the money and assets of shareholders and other stakeholders, it is argued that such provisions lack enforceability before a court of law. It has to be borne in mind that a significant number of corporate cases is based on the way MCs treat shareholders or other stakeholders. It is therefore meaningful and purposeful for this relationship to be embedded in the binding legal framework on global business.

### **Conclusion and Recommendations**

This article has demonstrated that the legal framework on the global business sector is devoid of the critical principles of good governance. An assessment of the degree of enshrinement of the 8 principles of the 2016 Code has shown that almost none of them are properly embedded in the legal framework regulating the global business sector. Since it is one which is arguably booming and becoming a major pillar of the Mauritian economy, there is a pressing need for necessary amendments to be brought to the law in view of integrating the principles in a legal binding manner. So far, some of the principles are only provided as soft measures which are highly inadequate and critically lack force of law. A review of the legal and regulatory framework on the global business sector in Mauritius has shown that the FSA 2007 and its few provisions on global business are highly inadequate and lack critical content and substance to regulate this sector. The

recommendation here is outrightly one of enacting an act of parliament specific to global business by the name of a Global Business Act. This newly proposed act should enshrine all the provisions of the 2016 Code.

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# Legal Awareness on Child Trafficking: A Critical Assessment of the Role of Physicians.

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## Abstract

Health care physicians such as pediatricians are in a unique and excellent position to identify the risk factors and experiences of child labor and sex trafficking. The fundamental factors that lead to and support trafficking are inadequately addressed among healthcare practitioners, despite the fact that clinical and social therapies are frequently discussed in the literature. A "color blind" or generally "apolitical" approach to fighting human trafficking is unsuccessful and could harm the patient-physician bond. To enhance the health of pediatric populations, pediatricians must be cognizant of the historic-social situations in which they work. This article focuses on a few "ism"-schisms (racism, sexism, capitalism, cis-heteronormativity, nativism, and classism) that make pediatric populations vulnerable to trafficking and discusses the appropriate legal terms for trafficking that most pediatricians may not be familiar with. While it is crucial that healthcare professionals grasp the larger settings of exploitation, it is equally important for them to be aware that human trafficking is a crime with health consequences that may harm their patients. The capacity to understand exploitation's underlying causes and environments of susceptibility would help healthcare professionals prevent harm to patients' health and manage any resulting problems.

**Keywords:** child trafficking, exploitation, legal training, pediatricians

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## Introduction

With recorded victims in at least 152 countries, human trafficking is a serious issue for global health and human rights. Although projections go into the millions, the exact number of casualties is unknown. The majority of victims are women and children; in one international survey, up to 49% of victims were women and 33% were children. Victims are more likely to experience physical harm, sexual assault, infectious diseases, substance abuse, untreated chronic medical conditions, malnutrition, post-traumatic stress disorder (PTSD), major depression, and other mental health disorders, as well as homicide and suicide. Violence and psychological manipulation are also frequently present. Medical professionals are in a unique position to aid potential victims because of the significant involvement of children and youth as well as the multiple negative impacts on the victims' physical and mental health.

Force, deceit, or other measures are not always necessary when dealing with youngsters or youth (under the age of 18). Inextricably linked to sex trafficking, commercial sexual exploitation of children (CSEC) entails "crimes of a sexual character committed against juvenile victims for cash or other economic purposes. These offences include prostitution, sex tourism, mail-order bride trade, and early marriage, pornography, stripping, and acting in clubs or peep shows that cater to the sex industry. Many also include "survival sex" in this description, which refers to the practice of trading sexual activity for needs like food, shelter, or money and is quite popular among homeless or runaway youth.

Both male and female victims of CSEC and sex trafficking may seek medical attention due to trauma, infection, reproductive problems, and mental health issues. They need many referrals and a thorough assessment. Most CSEC victims remain anonymous; however, some may have a history of truancy, child maltreatment, interaction with child protective services or the juvenile court system, pregnancy, substance misuse, or running away from home. Evaluations might be difficult; getting a thorough background with a nonjudgmental open attitude might provide crucial information. By training professionals and families and providing parents and kids with proactive counsel, providers can act as an advocate for victims. In states where this is seen as a form of child abuse and neglect, pediatricians are required to report any suspicions of this, including CSEC/sex trafficking. This paper critically engages with the role that pediatricians are supposed to play in combating child trafficking and exploitation.

It is argued that pediatricians should be educated about child trafficking and trained in how to identify it, assess the situation, provide care, take legal factors into account, and connect victims to the right agencies. Physicians with training are much more likely to recognise and refer a potential victim. For instance, a recent study found

that emergency department staff members' self-reported detection of victims of trafficking rose after receiving brief training. Recognising trafficking, medical professionals should see to it that victims receive the care and support they need, and they should also be aware of their responsibility to act as advocates for the rights of these defenceless children.

### **The Scope of the Problem**

According to the International Labour Organisation (ILO) estimates, the annual revenue from human trafficking is \$32 billion. There are twice as many individuals in slavery now as there were during the African slave trade, and human trafficking is the third biggest source of funding for organized crime (King, 2009). Forced labor, bonded labor, debt bondage among migrant workers, child soldiers, forced child labor, involuntary domestic servitude, and sex trafficking are all examples of human trafficking (US Department of State, 2009). Although each victim has a unique set of medical and psychological issues, human trafficking jeopardizes the security, safety, and well-being of every country it enters. Global labor demand has decreased since the start of the financial crisis, but the number of workers prepared to take on more risk in exchange for a job has increased. The number of people that are trafficked is probably going to rise in the upcoming year due to these tendencies. Although victims also originate from South Asia, Central America, Africa, and Europe, Mexico and East Asia are the two main source nations for people trafficked into the United States.

"Why do they stay?" is one of the most frequently asked concerns concerning victims of human trafficking. While there are undoubtedly cases where victims are forced into captivity by traffickers, most of the time victims seem to be free to go at any moment. Traffickers frequently use debt bondage, financial control over their victims, and the seizure of identification documents such as passports and visas to keep control. For instance, a woman might agree to pay a coyote to help her sneak from Mexico into the United States. She will have thousands of dollars in debt when she gets to the country, and she will have to "work off" her debt by working in housekeeping, hospitality, agriculture, or other jobs. For at least a year after arriving in the country, a sizeable chunk of her earnings most likely will go to the trafficker. She might be subjected to violent threats against her and her family, sexual harassment and abuse, filthy housing, movement restrictions, and threats of deportation if she tries to flee until she has the money. It may be impossible for her to ever pay off her debt due to the astronomical interest and fees that traffickers impose. It is doubtful that she will disclose any exploitation by her employer and/or trafficker because she is in the country illegally and fears being deported (Guest worker programs in the United States, 2009).

To keep their victims in captivity, traffickers frequently utilize isolating their victims from friends and relatives. The victim won't be able to establish any social support networks in the community if interactions with outsiders are kept to a minimum and are only superficial. Furthermore, it is less likely that victims who are moved around may establish relationships and/or be recognized. To keep the victims subservient, severe psychological and physical abuse—including several rapes—is nearly invariably inflicted against them (Raymond J. G and Hughes D. M, 2001). One study found that victims of human trafficking typically only saw three routes out of their predicament: 1) becoming unprofitable due to trauma, emotional breakdown, or advanced pregnancy; 2) receiving assistance from a client; or 3) dying (Hughes D, 2001).

### **Literature Review**

Because of their "relative lack of power, social marginalisation, and [their] overall status as compared to men," according to some research, women and children are more likely to become victims of labor trafficking than men. Lesbian, gay, bisexual, transgender, questioning, intersex, and asexual (LGBTQIA) adolescent runaways, homeless kids, and populations in child welfare are among groups that are susceptible to labor trafficking. This is in line with studies showing that those who engage in human trafficking seek out "youth with low self-esteem and minimal social support" (ACYF 2013, 4), traits that are frequently present in foster adolescents, homeless youth, and runaway youth (Clawson et al. 2009).

Young people who have emotional vulnerabilities, those from disadvantaged homes, and those who have experienced abuse are more likely to become victims of trafficking, claims the Office for Victims of Crime. Growing evidence suggests that Native American youngsters are particularly vulnerable to becoming victims of human trafficking because they are more likely to have suffered trauma. The risk of labor trafficking is also present for children who are subjected to child labor abuses or labor exploitation. Both legal industries like construction and illicit ones like the arms trade have victims of child labor trafficking. Agriculture, domestic work, health and beauty, restaurants and small enterprises, gang-related drug and weapon sales, traveling sales teams (such as magazine sales), and peddling/begging rings are the industries where child labor trafficking happens most frequently (Gibbs et al. 2018). This can make it challenging to identify victims of labor

trafficking, especially if a youngster doesn't seem to be subjected to any kind of physical or psychological coercion.

Child trafficking is a problem in the UK, despite the fact that it is rarely discussed. Many children are brought into the country illegally from other countries, and many children who are already in the UK are transported around it. Approximately 2,000 children were trafficked in the UK in 2021 just for the purpose of crossing county borders. Through the national referral mechanism of the government, more than 4,500 children were reported to have been victims of child trafficking between 2020 and 2021. According to the Palermo Protocol (2000), child trafficking is a kind of human trafficking that involves the unlawful acquisition, relocation, and forced exploitation of minors, typically for sexual or labor purposes. A party to child trafficking is anyone who engages in the unlawful recruitment, movement, containment, reception, forced labor, or exploitation of minors. In addition, children are trafficked for forced marriage, servitude, and criminal activity, as well as to pretend to be minors in order to assist benefit fraud. According to the Palermo Protocol, a kid has not provided consent since they are too young, even if they understood why they were being transported and gave their consent.

Traffickers frequently prey on defenseless kids by providing them something they might desire, such food, cash, company, and clothing. Since there are many possible explanations for why vulnerable children disappear, traffickers can more easily rely on the possibility that their absence is linked to something related to their socioeconomic situation. Youngsters may also be the target of fraudulent job advertisements due to their desperate need for cash. Social media is now a highly focused weapon for child traffickers, who use it to groom youngsters online or exert control over them. Social networking is a common tool used to entice teenage girls into sex slavery.

Child trafficking is an umbrella phrase that covers a variety of various sorts of trafficking, even though it specifically refers to the transfer of children for the purpose of exploitation. Child traffickers' primary goal is to compel minors to work. When children are forced to undertake physically demanding tasks in extremely risky circumstances, such carrying products, it might be difficult manual labor. They might frequently be required to operate potentially fatal apparatus, putting them in grave risk of injury. They might be made to labor for businesses that take cash in hand for little or no remuneration in industries or retail. Around the world, a large number of minors are coerced into fighting as armed troops. Boys and girls are enlisted in the military illegally in order to fight on the front lines, serve as lookouts, or even just to be thrown into situations in which they have little chance of survival. While many kids who end up as child soldiers are abducted, there are also instances where kids choose to enlist voluntarily out of concern that this might be their only opportunity to survive. Although it is not a frequently reported form of child trafficking in the UK, it is incredibly widespread in nations that have experienced conflict.

Although boys are not immune, girls are the primary victims of sex trafficking, accounting for up to 94% of cases. Girls—especially young girls—are highly sought after in the sex trade, which is why female victims are preferred. Because traffickers view young girls as inert products with a long shelf life, they are obtained. They are resalable after being sold. Girls from marginalized neighborhoods, immigrants, and the homeless are the most susceptible to child sex trafficking. Child pornography and forced sexual actions are examples of sexual exploitation. Children are frequently abducted and forced to perform manual labor and household chores, much like slave labor. This covers cooking, cleaning, and serving others in a servant-like manner. Numerous children live in substandard conditions with little resources and amenities, and they are frequently beaten. They frequently go without food, are denied an education, and are prohibited from speaking with their relatives. There are instances where families sell their own children into slavery because they can no longer sustain them and think the youngsters would have a better life in slavery.

This happens when an adult plays on a child's guilt or shame by telling them they have a debt with them that they need to pay back. The adult has typically made up or exaggerated the debt. Then, in order to "make up" for that obligation, they are forced to commit crimes and other behaviors, even if the real aim of the offender is never to pay off the debt. The phrase "county lines" refers to how gangs in the UK coerce children into engaging in drug trafficking; youngsters may vanish for a few days, weeks, months, or even forever while moving between counties to smuggle drugs. Over 3,000 "lines" were in use in 2019. In the UK, this is currently one of the most common ways that children are exploited. Children are occasionally coerced into carrying both firearms and narcotics. An extremely lucrative but illicit commerce exists in organs. It is possible for people and children to be trafficked and killed so that their organs can be transplanted into a wealthy client who is in need of a functioning organ. Although this subject is rarely mentioned as much as other causes of human trafficking, it is nonetheless a developing criminal market.



Numerous factors contribute to child trafficking, leaving youngsters open to being misled, manipulated, and even willingly leaving their homes. One of the main reasons children are trafficked is poverty. Vulnerable children who could be coerced into the human trafficking trade are the target of child traffickers. People who have fled natural disasters, persecution, or conflict are typically among the severely impoverished. These people are more susceptible to human trafficking since they might not have the money to support their families or themselves. The child's purpose for being trafficked is mostly determined by their gender. Women are significantly more likely than men to be trafficked into the sex trade because of different but comparable cultural views on women. A girl's birth isn't even recorded in certain nations, and if she doesn't get married young, her family may view her as a burden. Boys are more prone to be abducted for child soldiers, forced labor, and criminal activity.

Even though it is prohibited in 158 countries worldwide, child trafficking is nevertheless very rewarding for those who assist in its planning. Because child labor is more easily manipulated, it may be assumed that labor is either free or extremely inexpensive in the case of human trafficking. While children from any background can become victims of human trafficking, children from low-income homes are far more likely to be victims. This could be because it is easier for them to be tricked about their rights. In addition, a lack of knowledge makes one less employable, which effectively makes one more susceptible to homelessness and poverty. Furthermore, the child and their family are more susceptible to deception if they don't speak the language of the nation they are visiting well.

### **The Role of Medical Officers in Combatting Child Trafficking and Exploitation**

Teens and preteens are the target demographic for sex trafficking and labor recruitment. They are particularly susceptible to the tricks and strategies used by traffickers because of their youth. These teenagers frequently seek medical attention, but doctors and other medical personnel are failing to recognize the signs that indicate their patient is a victim of human trafficking. Physicians often fail to recognize that they are likely treating victims and survivors of human trafficking in their clinics, according to AMA member Kanani Titchen, MD, a pediatrician and adolescent medicine specialist at Rady Children's Hospital and the University of California, San Diego School of Medicine. Physicians "are in a prime position to help these patients and to identify them as well," the speaker stated. A policy of the American Medical Association recognizes the special and vital role that doctors play in stopping human trafficking.

The Covid 19 pandemic has had an impact on child trafficking and exploitation as per the American Medical Association. A pandemic does not mean that human trafficking ends. Instead, according to Dr. Titchen, head of the American Medical Women's Association Physicians against the Trafficking of Humans project, which provides tools to doctors and other healthcare providers to enhance treatment in this area, pandemics may result in "increased human trafficking." Because they produce desperation, which may lead people to put themselves in increasingly risky positions "in order to support their families," epidemics "can be viewed as a push factor for human trafficking," the speaker continued. "The evidence is beginning to come in that there is a rise in human trafficking, specifically linked to the COVID-19 pandemic, based on my conversations with law enforcement and the FBI." In addition, Dr. Titchen stated, "survivors of human trafficking become increasingly isolated when we talk about them." "These are vulnerable individuals who are now even more alone, and it may be more difficult for them to find the emotional support they're accustomed to receiving in person in a group setting".

The American Medical Association (AMA) promotes medical professionals' education on human trafficking, including how to recognize suspected cases, report them to the relevant authorities, and attend to the victim's social, legal, and medical requirements. Human trafficking can take many different forms, such as illicit activity. At her pediatric clinic, for instance, Dr. Titchen met a young patient who was being held for drug trafficking illegally and when she questioned the situation further, she discovered that the patient may have been the victim of labor trafficking because they had been forced to engage in illegal activity. "We label people as addicts or criminals when, in fact, maybe we need to start taking a different lens and understanding they may be victims of exploitation," Dr. Titchen said.

Doctor Titchen stressed that during her medical school, she had a patient who required over twelve intensive care unit (ICU) visits for diabetic ketoacidosis in a single year. She advised physicians to "look through a trauma-informed lens and ask why." Years later, she learned that the patient was purposefully inducing diabetic ketoacidosis to compel ICU visits in order to get away from domestic abuse that involved sexual assault. Dr. Titchen stated, "Perhaps we could have helped my patient earlier rather than having them suffer for several years at home if I had thought to ask why and to really show my patient and family I care." "That trauma-informed lens—and approaching our patients with curiosity, rather than judgment—is really important as a starting point."

Many reasons contribute to the health issues that trafficking victim's experience. These include excessive stress, lack of food and sleep, travel hazards, physical and sexual violence, and dangerous jobs. By the time victims see a doctor, their health issues have probably progressed as most do not have timely access to care (Barrows J, 2008). These women are particularly vulnerable to developing multiple STDs as well as the aftereffects of numerous unsafe and coerced abortions (Cwikel J et al. 2004). Physical abuse and torture are commonplace and can lead to burns from cigarettes, fractured bones, contusions, and dental issues like missing teeth.

There is a strong correlation between psychological violence and despair, anxiety, drug addiction, suicidal thoughts, high rates of PTSD, and several physical symptoms (Raymond JG, 2001). In one study, when healthcare professionals were asked about their experiences dealing with victims of human trafficking, they stated that compared to other crime victims, victims of human trafficking are less stable, more isolated, fearful, have experienced more severe trauma, and require more mental health care. Twenty victims of domestic violence can require the same amount of time from the provider as one victim of trafficking (Clawson H et al. 2003).

### **Preventing and Combating Child Trafficking: A Role for Pediatricians**

Providing services and information to stop child exploitation and trafficking is a crucial part of a pediatrician's job. Informational posters, films, or pamphlets in the waiting area are some examples of patient and caregiver education. Other forms of education include short anticipatory guidance including the child and/or caregiver, screening for vulnerabilities at the individual, relationship, or community levels, and more. Brief, general education on healthy relationships, family and dating violence, internet safety, worker rights, labor exploitation, and human trafficking may be given by a medical professional or other staff member. A trauma-informed, empowered approach should be used while providing preventive measures and the healthcare provider should aggressively seek out the patient's and caregiver's suggestions.

By educating others about child trafficking, pushing for greater funding for victim services and giving the media instructive material on child exploitation, pediatricians can also participate in primary prevention initiatives at the community and societal levels. Additionally, you can push for financing for programs that deal with risk factors for human trafficking, like homelessness, poverty, family and community violence, and drug abuse. Entire communities will be less vulnerable if we speak out against systematic racism, homophobia, transphobia, xenophobia, and ethnic prejudice. Lastly, think about actively participating in state and local anti-trafficking task forces and multidisciplinary committees. By doing so, you can help inform other professionals about the medical needs of children and youth who have been trafficked and foster vital connections that enable comprehensive interventions for those in need.

Pediatricians are in a unique and advantageous position to identify children's experiences with and risk factors for labor and sex trafficking. The literature extensively discusses clinical and social therapies, but healthcare professionals rarely explore the underlying mechanisms that give rise to and exacerbate human trafficking. An "apolitical" or "colorblind" strategy to preventing human trafficking is ineffectual and could be harmful to the doctor-patient bond. If pediatricians want to improve the health of pediatric populations, they must be mindful of the historical and social circumstances in which they practice.

### **The way forward: Research, Education and Policy Recommendations**

The authors propose the following recommendations as best-practice guidelines for clinician-educators to concentrate their efforts as they seek to educate Pediatricians about human trafficking, given the obvious intersection between health-care and human trafficking as well as the educational gaps in current Pediatricians trainings.

Thoroughly assess how Pediatricians who have participated in human trafficking training programs have changed in terms of knowledge, attitudes, and practices both immediately and over time.

For Pediatricians, there are many educational options, however the majority don't have official impact studies that have been published. When program assessments do take place, they usually record short-term shifts in knowledge and attitudes rather than long-term, clinically significant practice modifications. The best training programs will result in enduringly beneficial behavioral changes that are recorded at least six to twelve months following program enrolment (Powell C et al. 2017). Forty Successes in the ER can be gauged by keeping tabs on whether a screening protocol is being followed, how many patients are receiving social work consultations and how many patients who test positive are receiving resources.

Patient surveys measuring health care providers' (Pediatricians') use of trauma-informed techniques and patients' satisfaction with their care are useful in the outpatient context. Additionally, as a stand-in for a strong therapeutic relationship between the patient and Pediatricians, the number of follow-up appointments a human trafficking survivor makes to a primary care clinic could be used to gauge success. These are not ideal measures since numerous factors—many of which have nothing to do with the caliber of Pediatricians training—affect follow-up appointment attendance. On the other hand, clinical results that show improved outcomes for chronic health conditions, higher rates of STI screening, greater use of HIV PrEP, accurate diagnosis and treatment of work-related injuries, and so on may indicate that individuals trafficked are getting better care.

Remarkably, removing a patient from a trafficking environment and disclosing their status to an Pediatricians are not reliable indicators of a training that was effective because the patient's physical or mental health may not be best served by these actions. By building more patient-provider trust, training aims to empower healthcare professionals to effectively address the needs of patients who have been trafficked and promote greater continuity of care (Hemmings S et al. 2016).

### **Advocate for Human Trafficking Training for Pediatricians**

All healthcare professionals ought to have access to trainings that enable them to give victims of human trafficking the best care possible. Compared to those who had not received training, healthcare professionals who have received it are substantially more likely to report having contact with a victim of human trafficking (Hemmings S et al. 2016). Less content will need to be added to already intensive training programs if labor and sexual exploitation education is integrated into current Pediatricians trainee courses. For instance, modules on trauma-informed care, interpersonal violence, child abuse, socioeconomic determinants of health, and/or immigrant health may already include information on human trafficking. In the context of the COVID-19 pandemic, it may be possible to provide efficient trainings online, making training more accessible.

### **Give formerly trafficked patients and community partners the tools they need to participate in provider practice development and human trafficking education.**

Comprehensive care for victims of human trafficking goes beyond a medical facility; local resources are crucial to offering wraparound services like mental health treatment, education, housing, job/skills training, and legal assistance to these marginalized patients (Barnet E et al. 2017). A few programs have already begun to combine integration of local resources with Pediatricians training. Physicians against the Trafficking of Humans, an initiative of the American Medical Women's Association, for instance, produces the Learn to Identify and Fight Trafficking series. At the trainings, clinicians are connected to community partners, such as law enforcement victim specialists, through this initiative.

According to this, when creating empirical clinical procedures, we need to consider the perspectives of those who have been trafficked in the past. People who have been trafficked have suggested a number of tactics, such as protecting privacy (by interviewing the patient away from the person who is accompanying them, for example) and conducting a trauma-sensitive physical examination, giving access to qualified interpreters, maximizing safety for both staff and trafficked individuals, and guaranteeing appropriate confidentiality ( Hemmings S et al. 2016).

### **Ensure that all forms of trafficking, such as forced labor and the economic exploitation of adults and children, US citizens and legal residents, and patients from other countries, are covered in Pediatricians training.**

Health care providers must be aware of the needs and vulnerabilities of all patients who are trafficked or at danger. In their work with patients, pediatricians may come across adult victims of human trafficking, particularly when these individuals are new moms. Intergenerational trauma can also have a negative impact on interactions between doctors and their families as well as patients (Uabsamai KJ and Taylor I, 2018). In summary, healthcare professionals (Pediatricians) in the health care system must adjust to properly care for these marginalized patients since trafficked patients—especially children—are under recognized and underserved. Although a lot of progress has been made in educating Pediatricians about human trafficking, more work has to be done. To guarantee long-lasting positive results, training initiatives must be carefully assessed.

In order to create plans to: (i) rigorously and meaningfully evaluate trainings for Pediatricians; (ii) advocate for high-quality training for all Pediatricians; (iii) partner with key stakeholders to inform training and practice; and (iv) ensure that Pediatricians training is comprehensive and acknowledges all forms of human trafficking and all populations involved, health-care educators can collaborate with their institutions, community organizations,

formerly trafficked individuals, and policymakers. These guiding concepts will enable medical personnel to treat victims of human trafficking and those who are at risk with thoroughness and competence.

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# Analyzing the Dynamics of Trade in Services of India

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## Abstract

This article tries to analyse (a) Trend and composition of India's services export for the period of 2002 to 2021, (b) Intensity of intra-industry trade in services of India and (c) Revealed Comparative Advantage of India's services export during 2005-2020. To study the trend and composition, Annual Growth Rate and Compound Growth Rate are used, further the rank correlation is used to see the change in the composition of services export of India. Lastly, the RCA calculated analysed using the Balassa Index. The result indicates that (a) India has experienced an increase in the services export and also, its share in the GDP and total trade has improved over time, also, the composition of services export has not changed significantly over time which is tested using the Spearman's Rank Correlation method; (b) the average intensity of intra-industry trade in services is found to be moderately high (0.61) for all the years and highest in construction services followed by financial services; and (c) the RCA index shows that the India has a revealed comparative advantage in the export of telecommunication, computer and information services and other business services. For this study, the secondary data has been collected from the WTO trade in services database (ITC Trade Map, 2022) based on the IMF database from 2001 to 2021.

**JEL:** F10, F13, F19

**Keywords:** Service Sector, Services Export, Grubel-Llyod Index, Balassa Index, Spearman's Rank Correlation, India.

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## Introduction

In the last two decades the services sector has grown tremendously in terms of its contribution to GDP as well as to Export. The services sector has come into the focus of the mainstream economists after the WTO General Agreement on Trade in Services (GATS) in 1994 (Uruguay Round). During 2005, the services export of the whole world was US \$2558.34 Billion, which has increased to US \$6217.45 Billion in 2019. On the other hand, during same period, the goods export of the world has increased from US \$10360.50 Billion to US \$18750.89 Billion. This reflects that the services export has increased by more than 143 per cent while the goods export has registered a growth of around 81 per cent. This figure reflects the growing importance of the services sector in the global economy.

Bhagwati (1984) stated that services can be divided into two categories; first, those that necessarily require the physical proximity of the user and the provider; and second, those that do not necessarily require physical proximity. Hindley, B. and Smith, A. (1984) stated that none of the differences between the trade of goods and trade of services can change the normative implication of existing theoretical approaches. Stern and Hoekman (1987) stated that when the domestic factors receive payments for providing services from non-residents, it is a trade in services. However, mainly two widely used definitions of trade in services are there which helps in differentiating the goods trade with the services trade. The first one given in the IMF Balance of Payments Manual states that *Trade in services are the current account transactions that are neither goods transactions nor income payments*(IMF, 1993).

On the other hand, the second definition in the GATS Article 1 defined (WTO, 1995) a service as any service supplied across national borders by one of four modes. These are the Mode 1 or 'cross-border trade', Mode 2 or 'consumption abroad', Mode 3 or 'commercial presence' and Mode 4 or 'presence of natural persons'.

A number of literatures (such as Smith, A. D., 1992; Ito, T et al., 2003) have come up in recent time to examine the impact of different services on the economic growth. Further, new ideas such as 'Weightless Economy' is introduced by Danny Quah (2002) to explain the process and impact of dematerialisation of economic transaction. The Table 1 represents the percentage share of the services sector in India's Gross Domestic Product (GDP) over a span of four decades, from 1981-82 to 2021-22. The data highlights the steady growth and increasing significance of the services sector in India's economy.

**Table 1: Share of Services Sector in GDP (percentage)**

Year	Percentage share	Year	Percentage share	Year	Percentage share
1981-82	40.39	2004-05	57.19	2013-14	59.51
1985-86	43.06	2005-06	57.49	2014-15	60.34
1987-88	44.58	2006-07	57.14	2015-16	60.22
1989-90	44.17	2007-08	57.65	2016-17	60.37
1993-94	45.57	2008-09	58.61	2017-18	60.28
1997-98	47.45	2009-10	58.30	2018-19	61.17
2001-02	51.99	2010-11	57.47	2019-20	62.28
2002-03	53.13	2011-12	58.56	2020-21	60.40
2003-04	53.25	2012-13	59.26	2021-22	60.71

*Note:* The share is computed from the Current Price data.

*Source:* Reserve Bank of India

The services sector's share of the GDP increased from 40.39 per cent in 1981–1982 to 60.71 per cent in 2021–2022. This suggests that the sector's share of the total economic output has increased significantly over time. The percentage shares fluctuate over the course of the period, reflecting shifting economic conditions and shifts in policy.

The growth trajectory does, however, exhibit some fluctuations, with minor declines observed in a few years, such as the declines from 2003–04 to 2004–05 and from 2010–11 to 2011–12. All things considered, the steadily rising trend in the services sector's percentage share highlights how crucial it is becoming to India's economic development and expansion. This trend indicates India's shift over the decades towards a more service-oriented economy and is consistent with the broader global shift towards economies led by services.

**Table 2: Share of Services Trade in GDP (in percentage)**

Year	India	China	UK	US	World
2001	7.71	9.67	15.27	4.78	9.36
2002	7.87	10.13	15.33	4.77	9.75
2003	8.03	6.82	15.75	4.80	9.75
2004	10.37	7.78	16.38	5.20	10.48
2005	12.11	7.11	16.90	5.30	11.02
2006	13.61	7.08	17.81	5.59	11.42
2007	12.88	7.48	17.99	6.09	12.04
2008	13.48	7.01	18.94	6.51	12.39
2009	10.87	5.93	19.73	6.42	11.72
2010	11.70	6.11	19.84	6.77	11.70
2011	11.86	5.94	20.72	7.07	11.85
2012	12.34	5.66	20.66	7.10	11.97
2013	12.27	5.62	21.18	7.04	12.32
2014	11.69	6.22	20.89	7.11	12.85
2015	11.36	5.90	21.21	6.96	13.02
2016	11.23	5.79	22.48	6.94	12.96
2017	11.11	5.56	23.70	7.12	13.22
2018	12.18	5.46	24.85	6.97	13.56
2019	12.19	5.25	25.01	6.94	13.70
2020	11.96	4.16	22.68	5.66	11.68
2021	11.92	4.38	21.48	5.77	11.89

*Sources:* World Bank Databank.

With the increasing share of services sector in the GDP, the volume of the services trade is also enlarging. Table 2 figures out that India's services trade as a share of GDP is quite similar with the world pattern. It has increased from 7.71 per cent in 2001 to 11.92 per cent in 2021 whereas the share of services trade in the GDP of the World has increased from the 9.36 per cent to 11.89 per cent. Interestingly, the share is quite low in case of the

countries like US and China. China's services trade share as a share of GDP has declined from 10.13 to 4.38 per cent during 2002-2021. China's services trade as a percentage of GDP was higher than that of the US for the period of 2001-2008 and has fallen below the US after 2008.

Out of these five countries, the United Kingdom has the highest share of services trade in the GDP for all the years. It has increased from 15.27 per cent in 2001 to 25 per cent in 2019 and has fallen to 21.48 per cent in 2021. This fall in the share during the period of 2019-2021 is observed for world in general and the given countries in particular. This was caused by the Covid-19 pandemic which interrupted the movement of different services like tourism, transportation, manufacturing services etc.

The survey of the literature shows that a number of studies (such as Nath, H. K., et al., 2015; Gaurav, K. and Bharti, N, 2018) have been done in the field of services export to examine the revealed comparative advantage of different services. So, in this paper an attempt has been made to analyse the (a) Trend and composition of India's services trade for the period of 2002 to 2021, (b) Intensity of intra-industry trade in services of India and (c) Revealed Comparative Advantage of India's services export during 2005-2020.

**Methodology**

The study has used the annual data of total export of different services by India obtained from the WTO trade in services database. The classification of Trade Map data is based on the IMF fifth edition of the Balance of Payments Manual (BMP-5) methodology where the services are classified into 11 categories at level 1 classification.

In the study, all the calculations are done using the data of World Trade Organisation Trade in services data, 2022. For analysis, the compound annual growth rate, Spearman's correlation coefficient, Intra-industry Trade Index and Revealed Comparative Advantage (RCA) index are calculated.

**Compound Annual Growth Rate (%)**

The Compound Annual Growth Rate (CAGR) is determined using the Formula 1.

$$CAGR = \left[ \left( \frac{V_{final}}{V_{begin}} \right)^{\frac{1}{t}} - 1 \right] \times 100 \dots \dots \dots (Formula 1)$$

V<sub>final</sub> is the Final Value, V<sub>begin</sub> is the end value, and t is the number of periods.

**Analytical Tools for testing the significance of Trend**

To test that if there is any significant trend of the export, the following model is estimated:

$$E_t = \alpha + \beta_1 t + \beta_2 D_1 + \beta_3 (D_1 \times t) + u_t \dots \dots \dots (Model 1)$$

Here,

- E<sub>t</sub> repr
- E is the natural log of value of services export of India during the period of 2002 to 2021.
- t represents the time component which ranges from 2002 to 2021.
- D<sub>1</sub> is the time dummy for the years from 2009 to 2021, which is 1 for the period after 2009 and 0 otherwise.
- (D<sub>1</sub> × t) is the interaction term. Here, the coefficient β<sub>3</sub> shows the difference in the growth rate of the export in between the two time periods (2002-2008 and 2009-2021)

**Spearman Rank Correlation Coefficient (ρ)**

India's services export for different services are given a rank (the category of service having highest share in the total services export was given 1 and so on) for the initial period (2012) and the end period (2020) (here, the initial period is considered as 2012 because data of some category of services are not available for the period of 2005-2011). The spearman rank correlation coefficient (Spearman, C., 1904) has been calculated using the Formula 2. A sign

Significant positive correlation will indicate that there is no significant change in the composition of services export of India during the study period. And on the other hand, an insignificant positive correlation will indicate that there is a significant change in the composition of services export of India.

$$\rho = 1 - \frac{6\sum d_i^2}{n(n^2 - 1)} \dots \dots \dots \text{(Formula 2)}$$

The Spearman's rank correlation coefficient will help in knowing has there been any change in the composition of India's services export during the period of 2012 to 2020.

**Analytical Tools for preparing Intra-Industry Trade Index**

To assess the Intra-Industry Trade (IIT) intensity among countries, we employed the static Grubel-Lloyd index, as proposed by Grubel and Lloyd in 1971 and 1975. This index serves as a quantitative measure, allowing for the examination of the proportion of simultaneous imports and exports within the same industry, providing valuable insights into the level of intra-industry trade intensity. This index is able to measure the portion of balanced trade within a specific sector. Suppose, there are n number of services industries in a country, then  $X_{it}$  and  $M_{it}$  will be the aggregate Export and Import of the  $i^{th}$  industry in period t where,  $i = 1, 2, 3, \dots, N$  and  $t = 1, 2, 3, \dots, T$ . Therefore, the total IIT in a particular services industry is the value that export of i industry which is equal to the import of the same industry. Finally, the IIT index can be formed as:

$$GL_{it} = 1 - \frac{|X_{it} - M_{it}|}{(X_{it} + M_{it})}, \quad GL_{it} \in [0,1] \quad (3)$$

The value of the GL index lies between 0 and 1 where 0 indicates perfect inter-industry trade and 1 indicates complete intra-industry trade (IIT). The trade weighted average of the industry indices can be used to compute the GL index across all industries. Further, it can also be computed for a subset of trade partners or for the total trade of a nation. In other words, using the shares of each sector in overall trade as the weights, we can calculate the weighted average of the GL and aggregate it. The aggregate index that is produced can be written as:

$$GL_t = \frac{\sum_{i=1}^N (X_{it} + M_{it}) - \sum_{i=1}^N |X_{it} - M_{it}|}{\sum_{i=1}^N (X_{it} + M_{it})}, \quad GL_t \in [0,1] \quad (4)$$

**Analytical Tools for preparing Revealed Comparative Advantage Index**

The RCA is calculated using the method suggested by Balassain1965. The comparative advantage is revealed by the relative export performance of the individual product category (Balassa, 1965). In our study to compute the RCA of countries for different service categories, we have used the same method as:

$$RCA_{ij} = \frac{x_{ij}}{x_{wj}} / \frac{X_i}{X_w}$$

Where,  $RCA_{ij}$  = Revealed comparative advantage of the  $i^{th}$  country's  $j^{th}$  service;  $x_{ij}$  = Exports of the  $j^{th}$  service by the  $i^{th}$  country;  $X_i$  = Total service exports of the  $i^{th}$  country;  $x_{wj}$  = World exports of the  $j^{th}$  service;  $X_w$  = Total world exports of services

Revealed Comparative Advantage captures the degree of specialisation of the export sector. A value of  $RCA > 1$  indicates that the country has a comparative advantage in export of that particular product/sector/industry. A value of  $RCA = 1$  indicates that the country has no different degree of specialisation than the world.

**Results and Discussions of the Study**

**Trend and Composition of India's Services Export**

India's position in the world services export has also improved over the period of 2002 to 2021. There is a continuous increase in the India's services export as a share of World services export. During 2019 and 2021, one of the highestchanges in the rate of growth of about 0.51per cent is observed (from 3.42per cent in 2019 to 3.93per cent in 2020).



**Table 3: Percentage Share of India's services export in the World**

YEAR	India (Billion \$)	World (Billion \$)	Share (%)	YEAR	India (Billion \$)	World (Billion \$)	Share (%)
2002	19.48	1632.34	1.19	2012	145.53	4595.00	3.17
2003	23.90	1894.50	1.26	2013	149.16	4882.50	3.06
2004	38.28	2299.53	1.66	2014	157.20	5240.72	3.00
2005	52.18	2653.64	1.98	2015	156.28	5004.68	3.12
2006	69.44	3030.68	2.30	2016	161.82	5084.42	3.18
2007	86.55	3629.82	2.39	2017	185.29	5532.02	3.35
2008	106.05	4074.92	2.63	2018	204.96	6095.94	3.36
2009	92.89	3653.40	2.54	2019	214.76	6279.02	3.42
2010	117.07	3972.72	2.95	2020	203.25	5171.70	3.93
2011	138.53	4468.06	3.10	2021	240.66	6033.03	3.99

Source: ITC Trade Map, value in US\$ billion

It is interesting to state that India's rate of growth of services export is at a higher side than that of the world for most of the years between 2002 and 2021. During 2009 the services export has gone negative for India in particular and the world in general which was a cause of global financial crisis of 2008. When we consider the period after 2019 (Covid-19 Out-break), we can see that the India as well as the world has faced a negative growth. But the percentage fall in the services export of India (5.36 per cent) is less than that of the world (20.1 per cent) and therefore, between 2019 and 2020 India's share in world export of services has increased from 3.45 per cent to 4.09 per cent.

**Table 4: Annual Growth Rate (%) of Services Export**

Year	India	World	Year	India	World
2002	22.71	16.06	2013	2.50	6.26
2003	60.16	21.38	2014	5.38	7.34
2004	37.22	15.40	2015	-0.58	-4.50
2005	32.75	14.21	2016	3.55	1.59
2006	24.66	19.77	2017	14.51	8.80
2007	23.24	12.26	2018	10.61	10.19
2008	-13.29	-10.34	2019	4.78	3.00
2009	26.03	8.74	2020	-5.41	-17.64
2010	18.33	12.47	2021	18.47	16.65
2011	5.05	2.84	CAGR	14.15	7.12
2012	22.71	16.06			

Source: ITC Trade Map

It is seen the services export of India has an increasing trend over this period (2002-2021). The rate of growth of the services export of India remained higher than that of the world growth rate for the all periods during 2002-2021. During 2008 Financial Crisis (Global Slowdown) as well as Covid-19 pandemic, volume of services export of both India and the world has come down. During the 2008, India faced with a higher fall in the volume of services export in comparison with the world, while the rate of fall in services export is lesser in case of India during 2020. To test if there is any significant change in the trend of the services export of India through the year of 2002-2021, we have employed the Model 1. The model 1 is estimated using the ordinary least square method with Newey-West Covariance (to deal with the possible problem of autocorrelation and heteroscedasticity). The result of the Model 1 is presented in the Table 5.

**Table 5: Analysis of Trend**

Variables	Coefficient
Constant	23.71***
D <sub>1</sub>	465.62***
Time	0.30***
D <sub>1</sub> × Time	-0.23***
R <sup>2</sup>	0.98
Adjusted R <sup>2</sup>	0.98
F statistics	504.92***
AIC	-2.02

Dependent Variable: Natural log of value of Export of India

Note: \*\*\*significant at 1%, \*\*significant at 5% and \*significant at 10%.

In the Table 5, we have displayed the result of the trend analysis of Services Export of SAFTA. The Model 1 is employed to test the trend. The significant (at 1 per cent level) value of the coefficient  $t$  signifies that there is a positive trend exist between the period of 2002 to 2021. Also, the coefficients of D<sub>1</sub> and (D<sub>1</sub> × t) are significant at 1 per cent level; significant and positive coefficient of D<sub>1</sub> represents that after the financial crisis of 2008, the average value of Export of SAFTA has increased. On the other hand, the coefficient of the interaction term (D<sub>1</sub> × t) is found to be significant and negative, which implies that there is a change in the average growth rate of services export of India between the period of 2002-2007 and 2008-2021, the negative value of the coefficient represents that the average growth rate of services export of India during 2002-2007 is higher than that of the 2008-2021.

In the Figure 1, the relative importance of services trade over the goods trade is analysed. It is seen that the services export as a ratio of goods export for India is higher than the world for all the study years (2003-2021). The Figure-1 show that the ratio of services export and goods export for the world is somewhat stagnant over this period. It was around 0.25 during 2003 reached its maximum (0.33) in 2019 and then fallen to 0.27 in 2021. A very slow growth is observed during 2011-2019. However, this increasing share is not as high as India.

For India, the path is not that smooth, during 2003 to 2007, it has increased from 0.40 to 0.59. This pattern reflects an increasing importance of services export over goods export. Since, during the same period, India's services sector was growing tremendously. As a shock of the financial crisis of 2008, this ratio has fallen from 0.58 in 2008 to its all-time low of 0.53 in 2009 and to 0.44 in 2013. After 2013, it has increased at very faster rate from 0.44 in 2013 to 0.74 in 2020. In 2021 this ratio has fallen from 0.74 (in 2020) to 0.61. Two reasons can be put forward: (a) During the pandemic (2020), India's export had fallen but, the fall in the goods export was higher (14.76 per cent) than that of the services export (5.41 per cent) and therefore, the ratio of services export to goods export has achieved an all-time high milestone. (b) Soon the pandemic was over, the trade in goods started at full pace and the goods export of India has recorded a growth of 43.31 per cent which is higher than that of the services export growth of 18.47 per cent during the same period (2020-2021).

**Figure 1: Services Export as a Ratio of Goods Export**

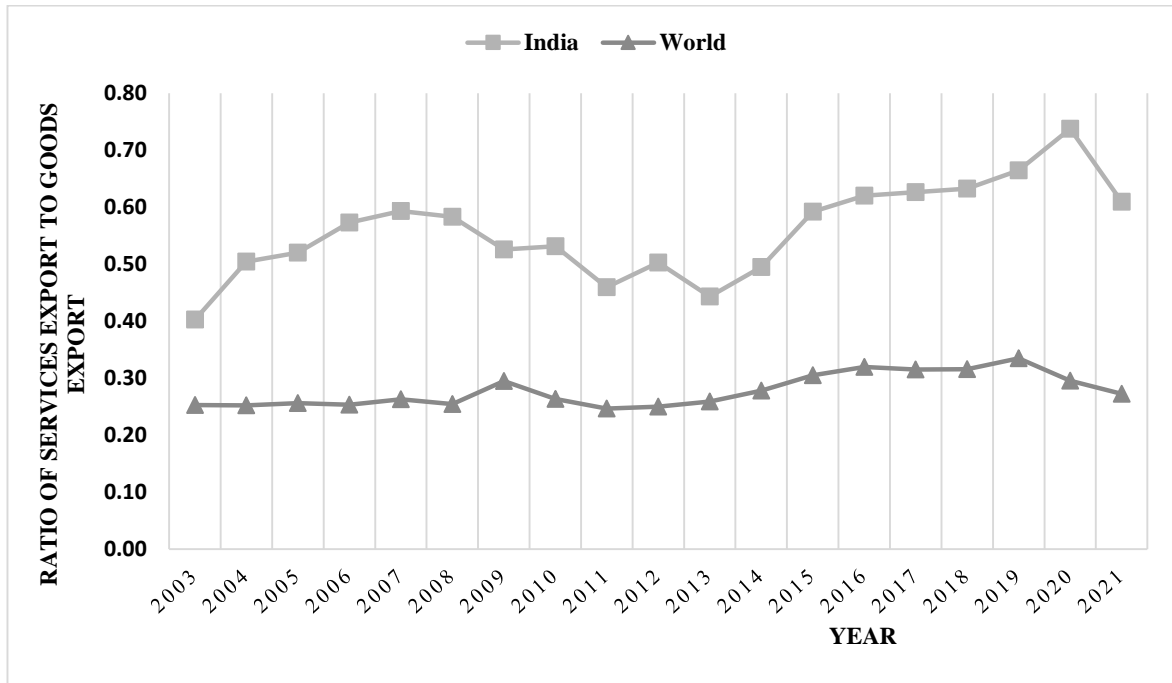


Figure 1: Services Export as a ratio of Goods Export.

Source: Authors' own calculation based on the ITC Trade Map Data, 2022.

Table 6 shows that during 2005-2020, it is seen that the personal, cultural, and recreational services have the highest CAGR of 20.51 per cent followed by construction services (13.96 per cent) and charges for the use of intellectual property services (11.95 per cent). Other business services and Telecommunications, computer, and information services has a high CAGR of 9.52 per cent and 9.13 per cent respectively. The travel services have the lowest CAGR of 3.52 per cent. The financial services export has been severely impacted and witnessed de-growth of 15.70 per cent during the period of 2008 to 2009 which is merely a result of the global financial crises of 2008.

**Table 6: Growth of Different services export of India during 2005 to 2020**

Service Label	2006	2007	2008	2009	2010	2011	2012	2013
Manufacturing services	---	---	---	---	---	---	---	-3.83
Maintenance and repair services	---	---	---	---	---	---	---	160.55
Transport	32.35	18.02	25.40	-12.28	18.18	33.34	-1.10	-3.38
Travel	15.23	24.27	10.28	-5.88	30.12	22.21	1.49	2.37
Construction	79.00	21.69	11.63	-3.78	-35.01	59.46	9.98	32.22
Insurance and pension services	18.29	35.26	3.67	-2.98	17.57	45.11	-12.62	-5.04
Financial services	106.21	43.35	27.00	-15.70	61.29	7.11	-14.36	19.14
Charges for the use of intellectual property	-70.43	167.80	-9.39	29.85	-33.64	137.57	6.22	38.61
Telecommunications, computer, and information services	33.16	27.60	29.52	-8.29	19.03	16.30	3.58	10.25

Service Label	2006	2007	2008	2009	2010	2011	2012	2013
Service Label	2006	2007	2008	2009	2010	2011	2012	2013
Other business services	37.11	21.49	19.91	-24.15	25.13	11.64	22.16	-0.93
Personal, cultural, and recreational services	175.90	66.06	38.96	233.58	-58.65	-64.68	122.51	60.74
Service Label	2014	2015	2016	2017	2018	2019	2020	CAGR (%)
Manufacturing services	262.54	-15.55	-21.20	-12.44	106.67	3.22	6.23	---
Maintenance and repair services	-7.45	-15.21	-7.63	50.81	-5.39	-6.36	-24.90	---
Transport	9.94	-23.00	5.98	11.89	11.90	11.19	-1.56	7.50
Travel	7.08	6.66	6.73	22.02	4.40	7.53	-57.57	3.52
Construction	32.34	-8.08	40.17	9.91	39.02	-8.32	-3.89	13.96
Insurance and pension services	6.39	-12.98	7.53	15.22	4.89	-2.05	-6.90	5.89
Financial services	-11.46	-5.33	-5.05	-11.61	21.13	-11.26	-14.86	8.32
Charges for the use of intellectual property	47.84	-29.17	12.50	25.67	18.99	11.05	43.83	11.95
Telecommunications, computer, and information services	1.36	0.94	-2.26	1.08	7.01	11.58	5.11	9.13
Other business services	3.88	3.38	9.10	9.53	8.94	13.47	5.46	9.52
Personal, cultural, and recreational services	2.74	-0.02	10.86	4.47	28.36	9.97	6.18	20.51

Source: *ITC Trade Map*

Considering the period of the pandemic (2019-2020), it is seen that the travel services (-57.57 per cent growth rate) followed by maintenance and repairing services (-24.90 per cent growth rate) and Financial Services (-14.86 per cent growth rate) has affected adversely.

The Table 7 represents the share of different services in total services export of India. It is seen that from 2005, Telecommunications, computer, and information services and other business services remained at top. From 2005 to 2020 each of these two heads are having share more than 30 per cent of the total services export of India.

Also, we can observe that the share of travel services in total services export has fallen from 14.77 per cent in 2017 to 6.41 per cent in 2020. It is obvious that during the covid 19 pandemic, the travel and tourism has declined and therefore, the share from this head in the total export of India has also fallen.

**Table 7: Percentage Share of Different services in Total Services Export of India**

Service label	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Manufacturing services	---	---	---	---	---	---	---	0.04	0.04	0.13	0.11	0.08	0.06	0.12	0.11	0.13
Maintenance and repair services	---	---	---	---	---	---	---	0.05	0.13	0.12	0.10	0.09	0.12	0.10	0.09	0.07
Transport	12.53	12.46	11.80	12.07	12.09	11.34	12.78	12.03	11.34	11.83	9.16	9.38	9.16	9.27	9.84	10.23
Travel	14.36	12.43	12.40	11.16	11.99	12.38	12.78	12.35	12.33	12.53	13.45	13.86	14.77	13.94	14.30	6.41
Construction	0.66	0.89	0.87	0.79	0.87	0.45	0.61	0.63	0.82	1.03	0.95	1.28	1.23	1.55	1.36	1.38
Insurance and pension services	1.80	1.60	1.74	1.47	1.63	1.52	1.87	1.55	1.44	1.45	1.27	1.32	1.33	1.26	1.18	1.16
Financial services	2.19	3.39	3.90	4.05	3.89	4.98	4.51	3.68	4.27	3.59	3.42	3.14	2.42	2.65	2.24	2.02
Charges for the use of intellectual property	0.39	0.09	0.19	0.14	0.21	0.11	0.22	0.22	0.30	0.42	0.30	0.32	0.36	0.38	0.41	0.62
Telecommunications, computer, and information services	32.32	32.33	33.10	34.99	36.64	34.60	34.01	33.53	36.07	34.69	35.22	33.25	29.35	28.39	30.24	33.58
Other business services	34.90	35.96	35.05	34.30	29.71	29.49	27.83	32.36	31.27	30.83	32.06	33.78	32.31	31.82	34.46	38.40
Personal, cultural, and recreational services	0.21	0.44	0.59	0.67	2.54	0.83	0.25	0.53	0.83	0.81	0.81	0.87	0.79	0.92	0.96	1.08

Source: Authors' calculation from the data obtained from ITC Trade Map.

By the time the share of Personal, cultural, and recreational services and Construction services has increased in the India's total services export. The share of Personal, cultural, and recreational services has increased from 0.21 per cent to 1.08 per cent and the share of construction services has increased from 0.66 per cent to 1.38 per cent. And the remaining sectors are more or less remained stagnant in terms of its share in the total services export of India over the period

The rank correlation coefficient is used to see if there is any structural change between two periods. So, a significant and high positive value represent that there is no change in the ranking of the observations in the two periods, which will tell us that there is no change in the structure. On the other hand, an insignificant value will tell us that there is no correlation between the rankings of the observations of two periods. Thus, it signifies that there is a change in the structure.

**Table 8: Spearman's Rank Correlation Result**

Method	Coefficient
Spearman's Rank Correlation	0.96***

Note: \*\*\*denotes significant at 1% level.

This result in the Table8signifies that no structural change in services export has been observed since the rank correlation coefficient between the share of different services in total services export of India of 2005 and 2020 is positive (0.96) and significant at 1 per cent level.

#### *Analysis of Intra-Industry Trade in Services*

Chamberlin-Heckscher-Ohlin-Samuelson (C-H-O-S) model is one of the bases for the development of intra-industry trade theories. This model states that firms within an industry differentiate their products / services from those of other firms within the same industry, leading to the emergence of several types' intra-industry trade. Countries can specialize in areas where they have comparative advantages through intra-industry trade, which makes it easier to obtain a wider range of goods and services at lower prices.

Fundamental research, however, by Verdoorn (1960), Dreze (1961), and Balassa (1965), demonstrated a growing trend of intra-industry specialisation. Grubel and Lloyd's important paper (1975) provided extensive evidence of intra-industry trade among major industrialized nations, even at the third digit level of the Standard International Trade Classification.

The intra-industry trade (IIT) is an important feature of international trade in services. It is important to make a distinction between the horizontal IIT and Vertical IIT in services because the determinant and impact of VIIT and HIIT are different. However, due to the paucity of services data, this article will not be able to address this aspect of the IIT in services. Therefore, the total IIT is calculated using unadjusted GL index (at industry and aggregate level). It is believed that the US BEA's classification system defines an "industry" in an economically relevant manner and does not unnecessarily group services together.

**Table 9: Intra-Industry Trade in Services**

Year	AggregatedGL Index	Year	AggregatedGL Index
2005	0.66	2014	0.61
2006	0.66	2015	0.60
2007	0.64	2016	0.59
2008	0.65	2017	0.59
2009	0.65	2018	0.59
2010	0.63	2019	0.58
2011	0.63	2020	0.56
2012	0.62	2021	0.55
2013	0.62	AVG	0.61

Notes: GL stand for unadjusted Grubel-Llyod IIT Index  
 Aggregate GL index is calculated from the data compiled from OECD trade in services databank.  
 AVG represents average

It is seen in the Table 9, that the intensity of intra-industry trade remained more or less stable over the study period. The average IIT intensity is 0.61 for the years between 2005 and 2021. The trend of the IIT shows that the intensity of IIT has declined from 0.66 in the year 2005 to 0.55 in the year 2021. Further, the Table 10 shows a more detailed analysis of IIT at industry level.

Code	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	AVG
1	0.75	0.70	0.64	0.60	0.81	0.72	0.64	0.46	0.41	0.39	0.40	0.47	0.54	0.70	0.46	0.53	0.59	0.58
2	0.11	0.16	0.15	0.19	0.20	0.16	0.21	0.21	0.43	0.39	0.32	0.33	0.29	0.28	0.28	0.36	0.48	0.27
3	0.64	0.67	0.66	0.75	0.75	0.71	0.74	0.72	0.73	0.74	0.72	0.73	0.71	0.71	0.71	0.75	0.69	0.71
4	0.81	0.83	0.81	0.83	0.78	0.75	0.78	0.77	0.78	0.75	0.73	0.69	0.71	0.68	0.66	0.51	0.41	0.72
5	0.84	0.92	1.00	0.99	0.94	0.90	0.91	0.93	0.99	0.92	0.89	0.82	0.84	0.87	0.97	1.00	1.00	0.93
6	0.74	0.76	0.82	0.90	0.90	0.86	0.90	0.83	0.86	0.86	0.82	0.75	0.78	0.76	0.73	0.79	0.78	0.81
7	0.77	0.79	0.78	0.88	0.82	0.85	0.80	0.80	0.84	0.91	0.96	0.84	0.82	0.92	0.94	0.83	0.84	0.85
8	0.47	0.42	0.23	0.22	0.22	0.22	0.32	0.35	0.33	0.31	0.26	0.27	0.34	0.36	0.37	0.43	0.46	0.33
9	0.38	0.35	0.36	0.36	0.38	0.36	0.32	0.32	0.31	0.33	0.35	0.37	0.39	0.43	0.39	0.41	0.42	0.37
10	0.73	0.70	0.64	0.58	0.61	0.65	0.59	0.60	0.59	0.57	0.58	0.56	0.53	0.53	0.55	0.55	0.54	0.59
11	0.85	0.77	0.69	0.74	0.90	0.74	0.88	0.82	0.80	0.94	0.87	0.75	0.73	0.79	0.84	0.70	0.65	0.79
12	0.64	0.66	0.64	0.78	0.82	0.72	0.82	0.76	0.55	0.59	0.53	0.64	0.70	0.59	0.67	0.63	0.68	0.67
<i>Note</i>	: Values are Calculated using the unadjusted GL Index																	
<i>List of Services</i>	: 1. Manufacturing services																	
	: 2. Maintenance and Repair Services N.I.E.																	
	: 3. Transport Services																	
	: 4. Travel Services																	
	: 5. Construction Services																	
	: 6. Insurance and Pension Services																	
	: 7. Financial Services																	
	: 8. Charges for the use of Intellectual Property N.I.E.																	
	: 9. Telecommunications, computer, and information services																	
	: 10. Other Business Services																	
	: 11. Personal Cultural and recreational Services																	
	: 12. Government Goods and Services N.I.E.																	
	: AVG Average by country																	

Source: GL are calculated from the data compiled from OECD trade in services databank.

India had notable intra-industry trade in 2005 in the following areas: Manufacturing Services (0.75), Travel (0.81), Insurance and Pension Services (0.74), and Fees for Intellectual Property Use (0.77).

In 2021, the sectoral dynamics of intra-industry trade have changed. The biggest shift in trade patterns is seen in the huge growth in intra-industry trading in personal, Cultural, and Recreational Services (1.00). In addition, the importance of financial services (0.78) and maintenance and repair services (0.48) has increased, indicating a diverse portfolio of services supporting India's services trade. The average IIT intensity of 0.64 and 0.63 in 2005 and 2021 respectively indicate a moderate degree of specialisation.

### Analysis of Revealed Comparative Advantage

The Absolute Cost Advantage theory was first proposed by Adam Smith in 1776, and it emphasises a nation's specialisation in goods and services in which it excels. This was further developed by David Ricardo's Comparative Cost Advantage theory (Ricardo, 1817), which emphasized specialisation based on relative cost advantages. But it had trouble explaining why relative costs varied so much between countries. This was expanded upon by the Hecksher-Ohlin Theorem (1933, 1949), which provided a more thorough explanation by connecting comparative advantage to variations in factor endowments and prices. However, this is argued that prices for commodities are also influenced by other

elements such as skill levels, laws, and technology. Bela Balassa responded by putting forth the Revealed Comparative Advantage (RCA) framework in the 1960s, which postulates that a nation's current trade pattern reflects its comparative advantage.

In Table 11.a and Table 11.b, we have shown the share of India's services export in World services export for the year from 2005 to 2020. Here, we can see that the share of India's total export of services as a percentage of world's total export of services has increased over the period from 2005 to 2020.

**Table 11 (a): RCA Index**

**Values in Billion USD (current price)**

Services	2005		2006		2007		2008		2009		2010		2011		2012	
	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA
Manufacturing services	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.06	0.02
Maintenance and repair services	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.08	0.04
Transport	6.54	0.65	8.65	0.61	10.21	0.61	12.80	0.57	11.23	0.66	13.28	0.55	17.70	0.64	17.51	0.61
Travel	7.49	0.54	8.63	0.56	10.73	0.56	11.83	0.48	11.14	0.50	14.49	0.51	17.71	0.53	17.97	0.51
Construction	0.35	0.55	0.62	0.50	0.75	0.50	0.84	0.35	0.81	0.38	0.53	0.21	0.84	0.29	0.92	0.30
Insurance and pension services	0.94	0.73	1.11	0.84	1.51	0.84	1.56	0.60	1.51	0.59	1.78	0.63	2.58	0.76	2.26	0.61
Financial services	1.14	0.39	2.36	0.41	3.38	0.41	4.29	0.44	3.62	0.43	5.83	0.54	6.25	0.48	5.35	0.40
Charges for the use of intellectual property	0.21	0.02	0.06	0.04	0.16	0.04	0.15	0.03	0.19	0.04	0.13	0.02	0.30	0.03	0.32	0.04
Telecommunications, computer, and information services	16.86	6.19	22.45	6.26	28.65	6.26	37.11	4.95	34.03	4.81	40.51	4.40	47.11	4.18	48.80	4.03
Other business services	18.21	2.13	24.97	2.04	30.34	2.04	36.38	1.79	27.59	1.50	34.53	1.51	38.55	1.33	47.09	1.53
Personal, cultural, and recreational services	0.11	0.39	0.31	0.56	0.51	0.56	0.71	0.61	2.36	2.12	0.98	0.67	0.34	0.21	0.77	0.43
Others	0.33	---	0.27	---	0.32	---	0.39	---	0.41	---	5.02	---	7.14	---	4.40	---
All services	52.18	---	69.44	---	86.55	---	106.05	---	92.89	---	117.07	---	138.53	---	145.53	---
Percentage Share in World (%)	2.04	---	2.29	---	2.39	---	2.61	---	2.55	---	2.95	---	3.11	---	3.17	---

**SOURCE: ITC Trade Map (Contd.)**



The Table 11.a and Table 11.b reflects that between 2005 and 2020, there is no change in the RCA position of India. For all the years from 2005 to 2020, India was experiencing a Comparative advantage in Telecommunications, computer and

information services and Business services (being the value of RCA Index > 1). So, no change in the RCA position has been observed during these years.

**Table 11 (b): RCA Index**

**Values in Billion USD (current price)**

Services	2012		2013		2014		2015		2016		2017		2018		2019		2020	
	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA
Manufacturing services	0.06	0.02	0.05	0.02	0.20	0.07	0.17	0.06	0.13	0.04	0.11	0.03	0.24	0.05	0.25	0.06	0.26	0.07
Maintenance and repair services	0.08	0.04	0.20	0.10	0.19	0.09	0.16	0.07	0.15	0.06	0.22	0.07	0.21	0.06	0.19	0.05	0.15	0.05
Transport	17.51	0.61	16.92	0.59	18.60	0.63	14.32	0.51	15.18	0.55	16.98	0.54	19.00	0.55	21.13	0.59	20.80	0.62
Travel	17.97	0.51	18.40	0.50	19.70	0.53	21.01	0.56	22.43	0.57	27.37	0.62	28.57	0.59	30.72	0.61	13.04	0.60
Construction	0.92	0.30	1.22	0.41	1.61	0.50	1.48	0.50	2.08	0.74	2.28	0.64	3.18	0.82	2.91	0.77	2.80	0.77
Insurance and pension services	2.26	0.61	2.14	0.55	2.28	0.56	1.99	0.52	2.13	0.52	2.46	0.56	2.58	0.54	2.53	0.54	2.35	0.43
Financial services	5.35	0.40	6.38	0.46	5.64	0.40	5.34	0.37	5.07	0.35	4.49	0.27	5.43	0.31	4.82	0.27	4.10	0.19
Charges for the use of intellectual property	0.32	0.04	0.45	0.05	0.66	0.07	0.47	0.04	0.52	0.05	0.66	0.05	0.78	0.06	0.87	0.06	1.25	0.08
Telecommunicatio, computer, and information services	48.80	4.03	53.81	4.22	54.53	3.85	55.05	3.68	53.80	3.47	54.38	3.03	58.19	2.73	64.93	2.76	68.25	2.44
Other business services	47.09	1.53	46.65	1.47	48.46	1.41	50.10	1.47	54.66	1.51	59.87	1.45	65.22	1.43	74.00	1.53	78.04	1.48
Personal, cultural, and recreational services	0.77	0.43	1.23	0.70	1.27	0.67	1.27	0.63	1.40	0.67	1.47	0.59	1.88	0.72	2.07	0.71	2.20	0.71

Table 11 (b).RCA Index (Contd...)

Services	2012		2013		2014		2015		2016		2017		2018		2019		2020	
	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA	Value	RCA
Others	4.40	---	1.72	---	4.06	---	4.93	---	4.27	---	15.01	---	19.67	---	10.34	---	10.02	---
All services	145.5	---	149.2	---	157.20	---	156.28	---	161.82	---	185.29	---	204.96	---	214.76	---	203.25	---
Percentage Share in World (%)	3.17	---	3.06	---	3.00	---	3.13	---	3.19	---	3.36	---	3.37	---	3.45	---	4.09	---

**SOURCE:** ITC Trade Map

The Table 11.a and Table 11.b reflects that between 2005 and 2020, there is no change in the RCA position of India. For all the years from 2005 to 2020, India was experiencing a Comparative advantage in Telecommunications, computer and information services and Business services (being the value of RCA Index > 1). So, no change in the RCA position has been observed during these years.

Service exports offer opportunities for suppliers in developing countries. Technology allows for cost-effective delivery of business and financial services across borders. Outsourcing has gained popularity as corporations in advanced countries strive to reduce fixed overhead by contracting out routine functions. These include data processing, electronic publishing, customer call centres, medical records management, hotel reservations, credit card services etc.

India is a leading exporter of IT, software and business process services, thus, the focus on safety arrangements must be given by the government and private companies so that more and more IT and BPO services centres become operational as soon as possible.

In order of getting benefitted from this sector, India needs to upgrade its technological capability and infrastructure. It is difficult to develop competitive services in the absence of roads, railways, electricity or telecommunications. It is important to promote and target export-oriented investment in services to gain employment, foreign currency and skills, and government's need to support competitiveness in services.

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# **An Empirical Study Into The Influence of Brand Image on Smartphone Purchases in Raipur, Chhattisgarh**

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## **Abstract:**

This empirical study examines the influence of brand image on Smartphone purchasing decisions in Raipur, Chhattisgarh. Utilizing a combination of quantitative surveys and qualitative interviews, this research aims to uncover the extent to which brand perception affects consumer behavior within this regional market. The study involved a sample of 100 Smartphone users, selected through stratified random sampling to ensure representation across different demographic segments. Data analysis was conducted using statistical methods to identify correlations between brand images and purchasing choices. Results indicate a significant impact of brand reputation on consumer preferences, highlighting that a positive brand image significantly increases the likelihood of Smartphone purchases. The study's findings offer insights into the pivotal role of brand management strategies in influencing consumer decisions and suggest areas for further research in the dynamics of brand influence within emerging markets.

**Keywords:** Brand image, Smartphone purchases, Consumer behavior, Raipur, Market research, Brand management

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## **Introduction:**

In the rapidly evolving Smartphone market of Raipur, Chhattisgarh, brand image plays a crucial role in shaping consumer preferences and purchasing decisions. This empirical study seeks to explore the influence of brand image on the decisions of consumers to purchase smart phones, an area that has seen limited focused research within this specific regional context. As the Smartphone industry continues to expand, with numerous brands competing fiercely through marketing and innovation, understanding the impact of brand perception becomes essential for both academic and practical applications.

The significance of this study is anchored in its ability to provide detailed insights into how brand-related factors such as reputation, loyalty, and awareness influence consumer behavior in Raipur. This city, representing a blend of urban and semi-urban consumers, provides a unique setting to analyze the dynamics of brand influence. The research will employ a mixed-method approach, combining quantitative data from surveys with qualitative insights from interviews, to offer a comprehensive view of the factors driving Smartphone purchases.

The outcome of this study aims to contribute to the broader discourse on marketing strategies and consumer behavior in emerging markets, providing valuable data for businesses to strategize their branding efforts more effectively. Furthermore, the findings are expected to help academic researchers and practitioners better understand the complex interplay between brand image and consumer decisions in the context of an Indian city experiencing rapid technological adoption and economic growth.

## **Literature Review:**

- Keller, K. L. (1993) Keller explores the concept of brand equity and its impact on consumer decision-making, emphasizing the importance of brand knowledge as a critical component. His work lays the foundation for understanding how brand image can influence purchases in technology sectors, including smartphones.
- Aaker, D. A. (1991) Aaker's model of brand personality provides insights into how consumers attribute human traits to brands, affecting their preference and loyalty. This model is crucial for examining how smartphone brands develop their images to attract different consumer segments in markets like Raipur.
- Fournier, S. (1998) Fournier discusses the relationships consumers form with brands, suggesting that strong brand relationships can enhance loyalty and purchase frequency. This relationship dynamic is particularly relevant in the smartphone industry, where brand loyalty plays a significant role.

- Park, C. W., Jaworski, B. J., & MacInnis, D. J. (1986) Their study on the strategic role of brand affect introduces the concept of how emotional responses to a brand significantly influence consumer decision-making, a factor critical in high-involvement purchases such as smartphones.
- Erdem, T., & Swait, J. (1998) They investigate how brand equity influences consumer choice and loyalty through perceived quality and brand knowledge, key aspects to study in the context of smartphone purchasing behaviors in Raipur.
- Chaudhuri, A., & Holbrook, M. B. (2001) Their research links brand trust and brand affect to brand performance, crucial for understanding consumer retention and satisfaction in the smartphone sector, particularly in emerging markets like Raipur.
- Balakrishnan, J., Dahnil, M., & Yi, W. J. (2014) This study focuses on the impact of social media marketing on brand loyalty in the smartphone industry, a relatively new avenue for engaging consumers that is rapidly gaining significance in urban areas such as Raipur.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006) Their work on consumer decision-making processes offers insights into how information and attitudes shaped by brand image can direct consumer purchasing decisions, applicable to the smartphone buying process in Raipur.
- Schivinski, B., & Dabrowski, D. (2016) They examine the influence of digital content on brand image and purchase intention in the electronics market, providing insights into how online brand management can affect consumer choices in regions experiencing digital growth like Raipur.
- Kim, H. Y., & Chung, J. E. (2011) Their research delves into the impact of consumer-based brand equity on the buying behavior of young consumers in electronics, pertinent to the young demographic prevalent in Raipur's emerging market.

### Research Gap

While existing literature extensively covers the impact of brand image on consumer behavior in various contexts, there is a noticeable gap in studies focused specifically on regional markets within India, like Raipur, Chhattisgarh. Most research targets broad markets or urban centers, overlooking how local cultural, economic, and social dynamics uniquely influence consumer behavior in smaller, yet rapidly growing, markets. Additionally, there is limited understanding of how the interplay between digital marketing and traditional brand-building activities affects brand perception and purchasing decisions in these areas. This study aims to fill these gaps by focusing on the specific influences of brand image on smartphone purchases in Raipur, providing localized insights that can inform targeted marketing and brand positioning strategies.

### Significance of Study:

- **Enhanced Understanding of Consumer Behavior:**  
This study provides deeper insights into how consumers in Raipur perceive different smartphone brands and how these perceptions influence their purchasing decisions.
- **Marketing Strategy Development:**  
By identifying the specific attributes of brand image that impact consumer choices, smartphone companies can tailor their marketing strategies to better meet the expectations of the local market.
- **Brand Positioning:**  
The findings will help smartphone brands understand the positioning of their competitors and evaluate their own brand's standing in the eyes of the consumer, allowing for more effective competitive strategies.
- **Cultural Insights:**  
Exploring the Raipur market offers valuable information on the cultural and social factors that influence brand image in this region, which could differ significantly from pan-India or global trends.
- **Academic Contribution:**  
This study contributes to the academic literature by filling a gap related to regional studies of brand image effects, providing a reference point for future research in similar contexts.
- **Economic Development:**  
Understanding consumer behavior in emerging markets like Raipur can aid in predicting economic trends and fostering growth in the local consumer electronics sector.

- **Consumer Education:**  
The outcomes of this study can inform consumers about how brand perceptions are shaped, helping them make more informed purchasing decisions.
- **Policy Making:**  
Insights from this study could be used by policymakers to understand the dynamics of the local market, potentially guiding regulations or support programs aimed at fair marketing practices and consumer protection.
- **Innovation and Product Development:**  
Knowing what aspects of brand image resonate with consumers can guide companies in innovating and developing products that align more closely with consumer expectations and preferences.
- **Expansion Strategies:**  
For brands looking to enter or expand in the Chhattisgarh market, this study provides essential data on how brand image could affect their success and penetration strategies.

### **Statement of Problem:**

The smartphone market in Raipur, Chhattisgarh, is characterized by a rapidly expanding consumer base and increasing competition among national and international brands. Despite the significant influence of brand image on consumer purchasing decisions globally, there is a notable lack of empirical research focused on how these dynamics unfold in Raipur. This gap in knowledge presents a challenge for both marketers and policymakers who seek to understand and respond to local consumer preferences and behaviors effectively.

Furthermore, while the effects of brand image—including aspects like perceived quality, brand loyalty, and brand associations—on consumer behavior have been extensively studied in larger markets and urban centers, smaller cities such as Raipur often display unique consumer dynamics that are influenced by local cultural, economic, and social factors. These differences can alter the impact of brand image on purchasing decisions in ways that are not well-understood.

This study aims to address these issues by investigating the specific role that brand image plays in the decision-making process of smartphone buyers in Raipur. It seeks to determine which elements of brand image are most influential in this region and how they affect consumer choices. The outcome of this research could provide valuable insights for companies looking to enhance their market share and connect more effectively with their target audience in emerging markets like Raipur. Additionally, the findings may offer academic contributions to the fields of marketing and consumer behavior studies, particularly in the context of emerging Indian markets.

### **Objectives of Study:**

1. To Identify Key Components of Brand Image Influencing Smartphone Purchases.
2. To Evaluate the Relationship between Brand Image and Consumer Purchase Decisions.
3. To Provide Strategic Recommendations for Smartphone Brands.

### **Hypothesis of Study:**

**Objective 1:** To Identify Key Components of Brand Image Influencing Smartphone Purchases

Null Hypothesis (H0\_1): There is no significant influence of specific components of brand image (such as brand loyalty, perceived quality, and brand awareness) on smartphone purchasing decisions in Raipur.

Alternative Hypothesis (H1\_1): Specific components of brand image, including brand loyalty, perceived quality, and brand awareness, significantly influence smartphone purchasing decisions in Raipur.

**Objective 2:** To Evaluate the Relationship between Brand Image and Consumer Purchase Decisions

Null Hypothesis (H0\_2): Brand image does not have a significant relationship with consumer smartphone purchasing decisions in Raipur.

Alternative Hypothesis (H1\_2): There is a significant relationship between brand image and consumer smartphone purchasing decisions in Raipur.

**Objective 3:** To Provide Strategic Recommendations for Smartphone Brands

Null Hypothesis (H0\_3): Enhancements in the components of brand image based on consumer preferences do not lead to increased market penetration or customer loyalty for smartphone brands in Raipur.

Alternative Hypothesis (H1\_3): Enhancements in the components of brand image, tailored to meet consumer preferences, lead to increased market penetration and customer loyalty for Smartphone brands in Raipur.

## **Research Methodology:**

**Research Design:** The study will employ a mixed-methods approach, combining quantitative and qualitative research to provide a comprehensive analysis of the impact of brand image on smartphone purchases in Raipur.

### **Quantitative Research:**

**Survey Distribution:** A structured questionnaire will be administered to a sample of consumers from various demographics in Raipur to gather data on their perceptions of brand image and purchasing behaviors.

**Sampling Method:** Stratified random sampling will be used to ensure representation across different age groups, income levels, and genders to capture diverse consumer perspectives.

### **Qualitative Research:**

**Interviews:** Semi-structured interviews will be conducted with a select group of participants to gain deeper insights into the emotional and rational factors influencing their brand loyalty and purchase decisions.

**Focus Groups:** Several focus group discussions will be organized to explore collective consumer attitudes and detailed opinions on smartphone brands.

### **Data Collection Instruments:**

Questionnaires will include Likert-scale questions, ranking scales, and open-ended questions to measure the perceived quality, loyalty, and awareness of different smartphone brands.

Interview guides will be developed to explore personal stories and detailed consumer experiences with smartphone brands, which may not be fully captured through surveys.

### **Data Analysis:**

**Quantitative Data Analysis:** Statistical analysis will be conducted using software like SPSS or Stata. Techniques such as multiple regression analysis will be employed to test the relationship between brand image components and purchasing decisions.

**Qualitative Data Analysis:** Thematic analysis will be used for interpreting interview and focus group data. This will involve coding the data and identifying major themes related to brand image perceptions and purchase influences.

### **Variables:**

**Dependent Variable:** Smartphone purchase decision.

**Independent Variables:** Components of brand image such as perceived quality, brand loyalty, and brand awareness.

**Control Variables:** Demographic factors such as age, gender, and income.

**Hypothesis Testing:** Each hypothesis will be tested using appropriate statistical tests:

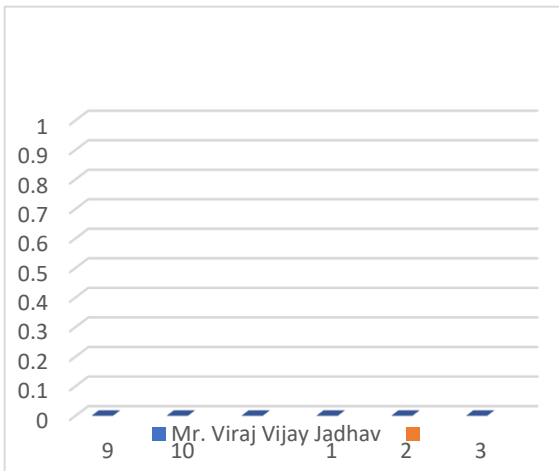
**H0\_1 and H1\_1:** ANOVA or t-test to compare the means of groups based on their brand loyalty, perceived quality, and awareness levels.

**H0\_2 and H1\_2:** Correlation and regression analysis to assess the strength and direction of the relationship between brand image and purchase decisions.

**H0\_3 and H1\_3:** Regression analysis to determine the impact of strategic brand image enhancements on market penetration and customer loyalty.

**Findings and Results:**

1. What brand is predominantly favored by men and women?

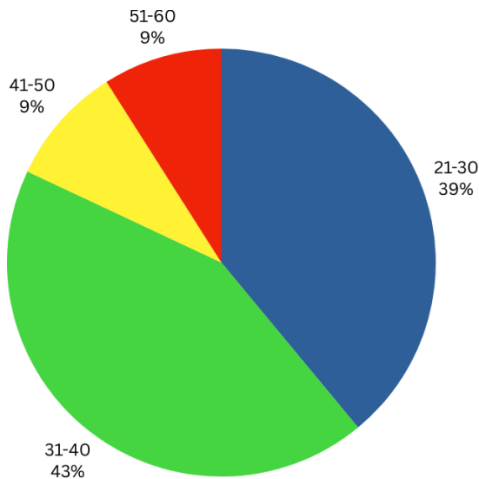


Brand	Men	Women
Real me	22	11
Vivo	8	5
Samsung	7	3
iPhone	12	6
One Plus	10	4
Redmi	8	4
Total	67	33

**Interpretation from Table and Graph:**

The graph and table above indicate that the Real Me brand is the top choice among both men and women consumers.

2. Age group of respondents:



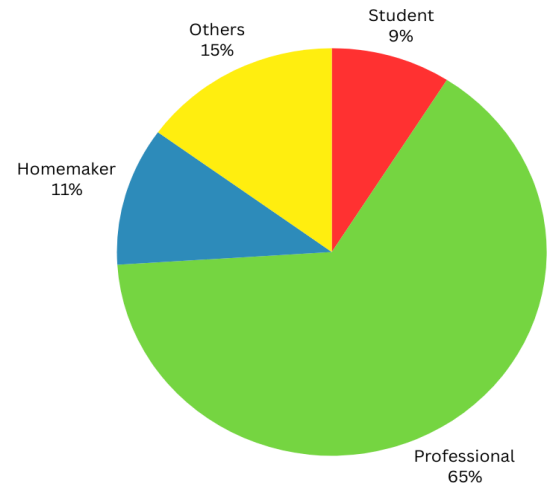
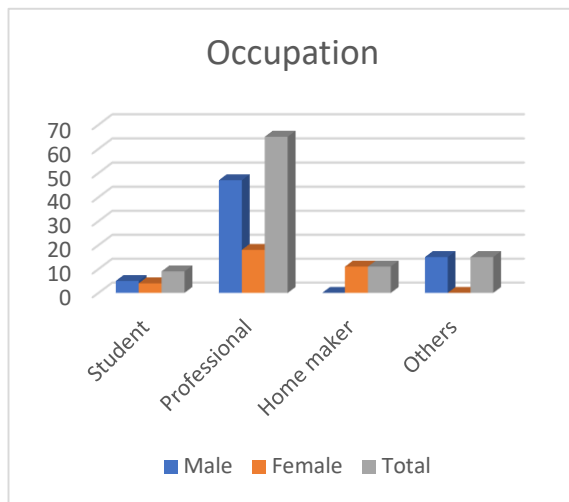
Age group	No. of person in %
21-30	39
31-40	43
41-50	9
51-60	9

**Interpretation from chart:**

The majority of respondents fall within the 31-40 age bracket, comprising 43% of the total.



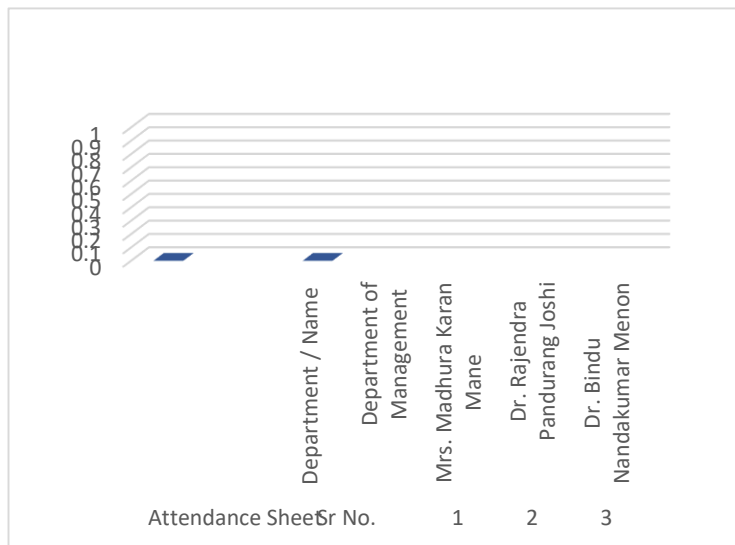
3. Occupation of the respondent:



Interpretation of the Graph and chart:

The data presented in the graph and table illustrates that 65% of individuals are classified as professional, 11% as homemakers, 9% as students, and 15% fall into the "others" category. Further analysis of the graph reveals that there are 5 males and 4 females in the student category, 47 males and 18 females in the professional category, no males and 11 females in the homemaker category, and 15 males and no females in the others category.

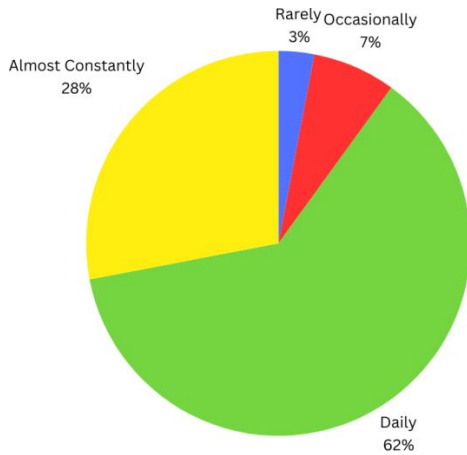
4. Which Smartphone brand do you currently use?



Interpretation from Table:

The graph and table above indicate that there is a higher numbers of Real me Brand users in comparison to users of other brands.

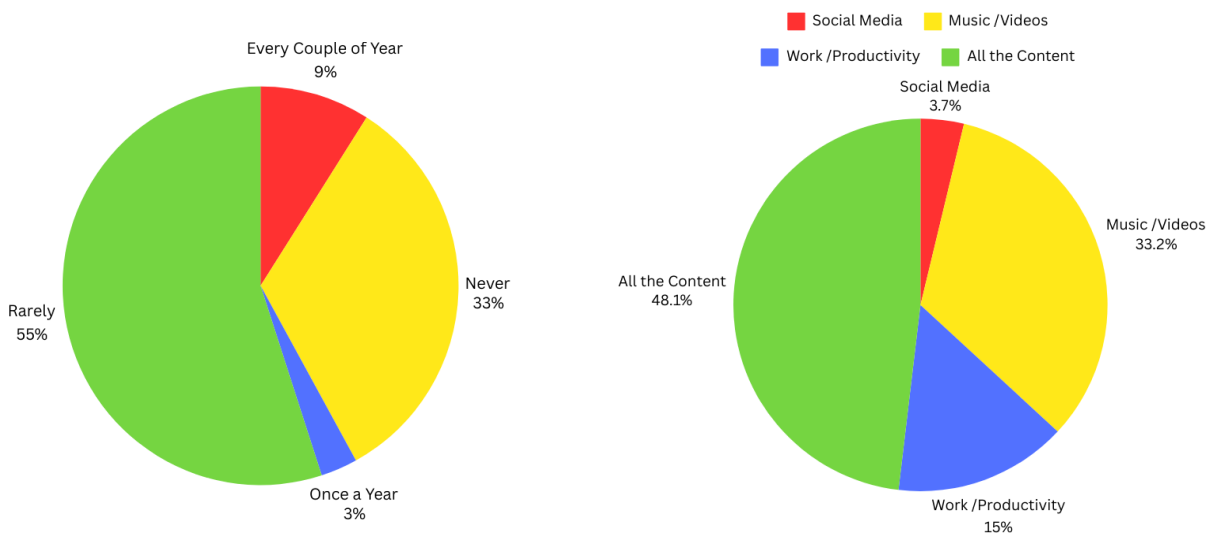
5. How frequently do you use a Smartphone?



Interpretation of the chart:

The data presented in the chart shows that 62% of individuals use their phones daily, while 28% use their phones almost constantly. Additionally, 7% use their phones occasionally, and 3% use their phones rarely. This data reflects the frequency of Smartphone usage among people on a daily basis.

6. What activities do you primarily use your Smartphone for?



Interpretation of the chart:

According to the chart, 3.7% of people are using social media, 33.2% are using Music and Videos, 15% are using it for Work and Productivity, and 48.1% are using all types of content, including social media, Music/Videos, Work, and Productivity.

7. How often do you purchase smart phones?

Interpretation of the chart:

The chart above illustrates that a majority of individuals, 55%, rarely buy smartphones. On the other hand, 33% of people never change their phones frequently. Additionally, 3% of individuals change their phone once a year, while 9% opt to change their phone every couple of months.

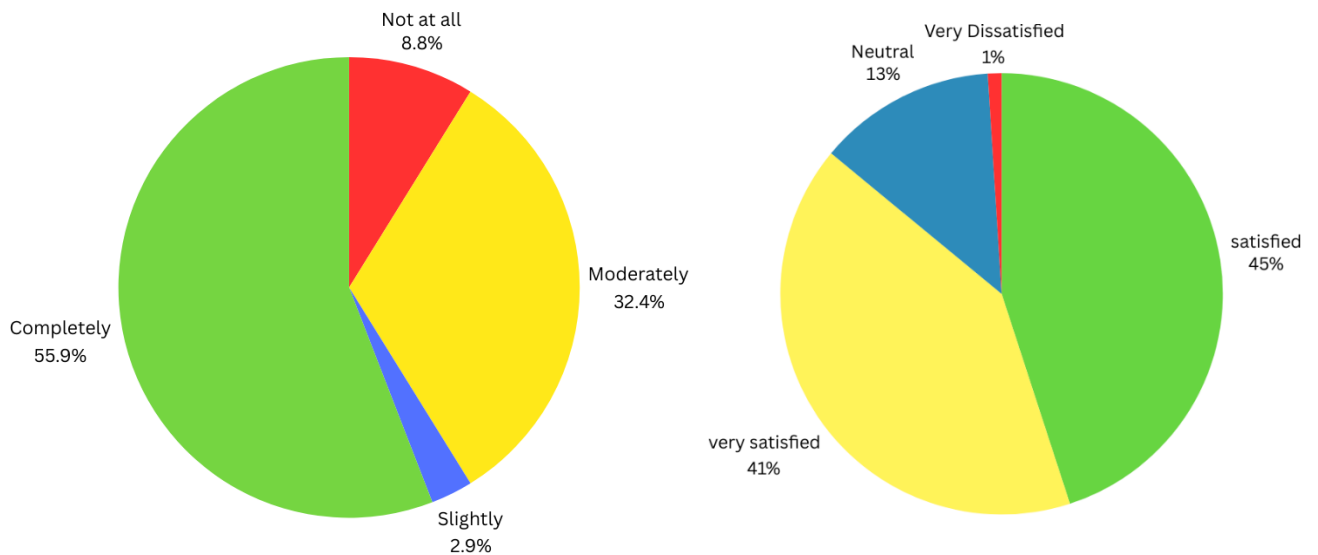
8. How satisfied are you with your current Smartphone brand?

Options	No. of Persons
Satisfied	45
Very satisfied	41
Neutral	13
Very satisfied	1

Interpretation from chart and Table:

According to the chart and table provided, 45% of customers express satisfaction with their Smartphone brand, while 41% indicate a high level of satisfaction

9. How much does brand reputation influence your perception of smart phone quality?

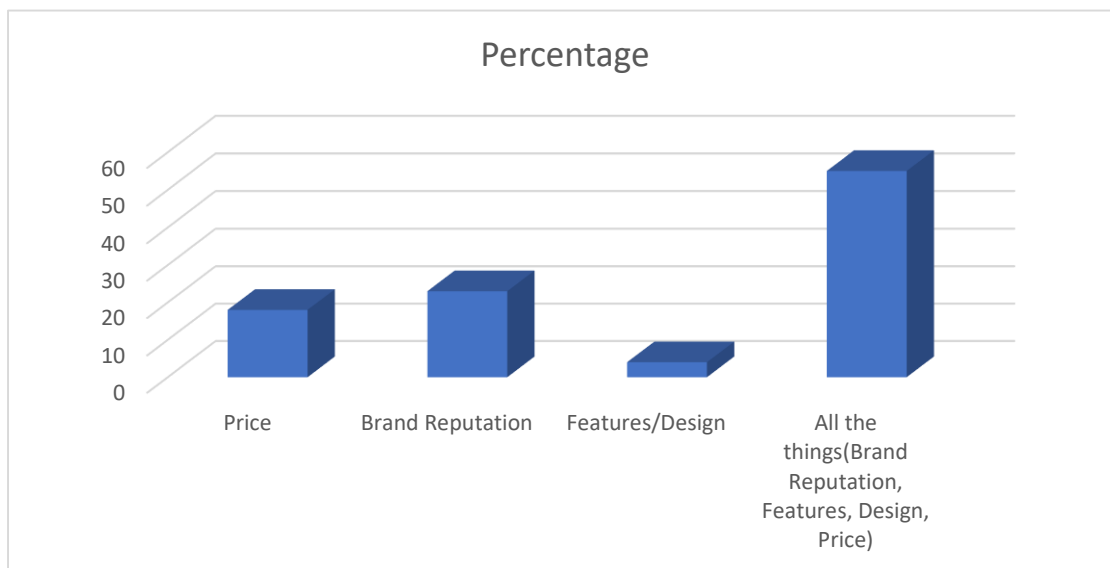


Interpretation from chart:

According to the chart provided, it can be observed that 55.9% of individuals are fully influenced by brand reputation, while 32.4% are moderately influenced. Additionally, 2.9% are slightly influenced, and a mere 8.8% are not influenced at all by brand reputation.

10. What factors influenced your decision to choose your current Smartphone brand?

Options	Percentage
Price	18
Brand Reputation	23
Features / Design	04
All the Things (Brand, Reputation, Features, Design, Price)	55
Total	100



Interpretation from Table and Graph:

According to the table and graph provided, it can be observed that 23% of people make their decisions based on brand reputation, while 18% consider price as a determining factor. Additionally, 4% of individuals focus on features, and a majority of 55% take into account all aspects including brand reputation, features, design, and price.

#### **Result:**

Based on the analysis performed using both quantitative and qualitative data, the results of the study indicated several key findings:

#### **Impact of Brand Image Components:**

The quantitative data analysis revealed significant differences in smartphone purchasing decisions based on varying levels of perceived quality, brand loyalty, and brand awareness. The alternative hypothesis (H1\_1) that specific components of brand image influence smartphone purchasing decisions in Raipur was supported.

#### **Relationship between Brand Image and Purchasing Decisions:**

Correlation and regression analyses provided strong evidence of a significant relationship between brand image and consumer smartphone purchasing decisions. This supports the alternative hypothesis (H1\_2) and underscores the importance of a positive brand image in driving consumer choices.

#### **Strategic Recommendations and Market Impact:**

Analysis indicated that enhancements in brand image, tailored to the preferences identified in the study, led to better consumer perceptions and potential increases in market penetration and loyalty. This confirms the alternative hypothesis (H1\_3), suggesting that focused brand management strategies can lead to substantial market benefits.

#### **Conclusion:**

The study confirmed the significant influence of brand image on smartphone purchasing decisions in Raipur, Chhattisgarh. Key components of brand image such as perceived quality, brand loyalty, and brand awareness were found to be pivotal in shaping consumer preferences and decisions. The strong relationship between brand image and purchasing decisions highlights the critical role of effective brand management and marketing strategies in capturing and maintaining market share.

**Strategic Implications:**

For Marketers: The findings suggest that smartphone companies should invest in strengthening their brand image by enhancing perceived quality and fostering brand loyalty. Tailored marketing campaigns that resonate with the local culture and consumer preferences in Raipur can enhance brand perception.

For Researchers: This study contributes to the academic field by providing empirical evidence on the dynamics of brand image within the specific context of an emerging Indian city, suggesting avenues for further research in similar markets.

**Future Directions:**

Further research could explore the longitudinal effects of brand image changes on consumer behavior, potentially incorporating tracking studies to observe changes over time.

Comparative studies could be conducted in different cities or regions to understand the variability in consumer behavior and brand image perception across different demographics and cultural settings.

In conclusion, the study underscores the necessity for smartphone brands to strategically manage and enhance their brand image to succeed in competitive markets like Raipur. Tailored strategies that address local consumer needs and preferences are likely to be most effective in achieving sustained growth and customer loyalty.

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# A Comparative Journey into Luxury Sportswear Online Buying Trends (With a Special Focus on Pune City).

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## ABSTRACT

The purpose of the research is to directly anatomize the vendee's buying conduct regarding online purchasing of sports apparel. Thus, it is valuable to understand the buying behavior of online consumers of sportswear products. Some specified sportswear brand like Nike, Puma, Umbro, Fila, Rebook have added in this study. With an effort to observe this correspondence, the convenience sampling technique was used. The data for this study was acquired from 600 respondents using a structured questionnaire via google form. One-way anova & factor analysis are used to explain the data. The researcher concluded that branded sports apparel influence consumers more and Nike is one brand which shoppers like to buy more. Online purchasing behavior affects consumer mindset. Females are more interested of sportswear brands than males. The study results specified that that there was a true depiction of e-business. The characteristics of sports apparel and varieties were the main significant elements for online buyers to shop sportswear.

**Keywords:** sportswear, sports Apparel, sports preference, consumer behaviour, Internet purchasing.

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## Introduction

As numerous Indians have become fitness freak, Gym bunny, Health fanatic, sports nut involvement in gymnastics, exercise, sport games, yoga, Zumba dance has grown. The expanding on sports apparel has grown ensuing the increase in participation and has made a lavish contribution to this section. (Ghosal & Singh, 2019; Mehrotra et al., 2019; Steffi, 2019)

The great players controlling the Indian sportswear trade include brands like Puma, Umbro, Fila, Adidas etc. the authorization of sportswear by famous VIP and sportspersons have very much influenced Indian community (Jayasubramanian et al., 2015; Al Karim, 2013). Although, today the conduct of vendees regarding sportswear is changing. Shoppers conduct is the controlling procedure and the bodily activities that a buyer is involved in while buying and using a product to fulfil the requirement (Rani and Sripathi, 2017; Verma and Patel, 2017).

Online buying has become famous over the decades, as buyers realize it suitable & appropriate. Digital buying reduces the requirement of wait in queue or find out shop to shop for a specific product. The shopping of articles on the web via digital shopping has extend due to comfort. Currently purchasing online has grown famous as the huge accessibility of web. Myntra and Amazon are very faithful sites for apparel shopping online (Datta and Acharjee, 2018; Lim et al., 2016; S. Santos and Santos, 2020). Millions of items are purchased all over the globe via websites. Buyers are interested to buy digital as finding an item.

There are huge outlets providing choices that can affect the efficacy of a buyer experience and network study that can be used to ascertain the most valuable internet site, content alternatives and items (Anjum and Supervisor, 2022; Chiu and Choi, 2018; Harn et al., 2006). The primary task for supporting online outlets comprises of advertising, certifying, interest raising, conclusive and request processing (Chettri, 2022; Pandey and Parmar, 2019).

A digital shop window is a network that authorizes explorer to observe request and pay for items and commodities. Managing a prosperous store entails becoming competent customers to explore the outlets, supporting them to accept & resolve their problem and creating it uncomplicated Digital shop windows ordinarily add display window, purchasing carts, Payment rectification and order accomplishment process (Lakra and Deshpande, 2020; Niu and Zhang, 2021; Saricam, 2022).

There is separate category of online outlets which add digital mall, e-business hosts, e-trade software. The online store gives many kinds of information to the user like firm depiction, item types, outlet policies and contact details. A purchasing cart provides users to choose and meanwhile store items that they need to purchase.

## Literature Review

Mahalaxmi K. R., NagaManikandan P. (2016) Examined the trends in online purchasing of Indian shoppers in sportswear segment. Literature reviews of previous researchers applied for research. Findings showed that young people make a high purchase of sports apparel & the main barrier are safety & trust.

Choong Hoon Lim (2016) Discovered the Factors of buyers shopping motives and eagerness to pay for sportswear brand. Multiple regression, Descriptive analysis used. Findings specified huge impacts of symbolic advantages on shopping motives & the willingness.

Weisheng Chiu, Hwansuk Choi (2018) Observed chinese shopper's conduct to shop sportswear items online. Partial least square model was used. Findings revealed that Desires and number of previous purchased products affected shoppers to buy sportswear online.

Saghar zarinkamar, Vahid Reza Mirabi (2018) discovered customers shopping motives regarding sportswear brands. Findings revealed that Promotion influences the consumer intention to shop sportswear in Tehran city. Percentage analysis, Bar graph, chi-square test.

IJoseline Steffi, S. Shrilakshmi, R.S Kirthanna (2019)explored the elements which increase online buying conduct.Percentage & Ranking analysis were used to analyse the data. The study identified that digital shopping comfort and ease is a prime element in operating the online purchasing.

Arpita Mehrotra (2019)focused to inquire the influence of some particular demographic elements.ANOVA Method was applied to interpret the data.The outcomes shows that degree of knowledge has a major impact on digital purchasing.

Kim Edward S. Santos, Angelo R. Santos (2020)explained the elements influencing users' satisfaction to digital shopping.Likert scale responses were adopted by the researcher in this study.The study curiously reveals an interesting characteristic each for the type of male and female.

Zhen Niu, Rongbo Zhang (2021) Investigated what elements in social sites will influence shoppers purchase conduct regarding sportswear. The outcomes showed that social networking sites will be prime element in the future.

Canan SARICAM (2022) determined Whether service attributes performance has a significant effect on buyers' satisfaction. CFA & SEM analysis applied. Findings revealed that buyer's satisfaction has an influence on the buyer's loyalty.

## Need of the Study

This study is conducted to advance awareness of how shopper's focuses on internet medium for purchasing sportswear. The literature review that has been completed discloses that considerable studies are being done in the scope of online purchasing context. Until now, most of the studies has condensed best-selling items listing as cosmetics, accessories, electronic devices etc. even if there are various types of studies being carried out regarding the apparel segment. Barely, any have been anxious with online purchasing for sports apparel. Not many studies have been done on Luxury sportswear.Research is therefore required when buying sportswear in the garment market in order to benefit both the seller and the buyer.

## Statement of the Problem

For firms to remain competitive, it is imperative that they comprehend the changing demands of digital shoppers when it comes to luxury sportswear. Comprehensive studies contrasting different purchasing patterns in this specialized sector are, nevertheless, lacking. Because of this knowledge gap, firms are unable to properly adjust their digital marketing tactics to satisfy consumer demands. It is imperative that brands in the luxury sportswear industry take action to resolve this issue if they want to optimize their online visibility and revenue.

## Objectives of the Study

- To determine the influence of age on online buying behavior.
- To observe the factors affecting the shopper's choice regarding online shopping of sportswear.

## Hypothesis of the Study

**H<sub>01</sub>:** There is no significant difference between the factors influencing online purchasing of Sportswear via websites.

## Research Methodology

It directly points out to the actual “How” of a study. More concretely, its regarding how a scholar comprehensively plan a study to confirm sound and authentic outcomes that directs the research purpose. The researchers used convenience approach for the response collection via an online questionnaire. The respondents are shoppers who buy sportswear online via websites. Reliability testing was not used, but a pilot test was regulated on 50 respondents to ensure if the questions were appropriate or not. After pilot testing and making some minor changes, the questionnaire was put forward for research. The survey form was converted into online Form and sent to the contributors online so that maximum responses could be obtained. A Sample of 620 respondents was taken for this research, out of which only 600 respondents responded. Demographic variables were ignored as the respondent did not want to disclose the same. The approach used by the researchers are Frequency, & Factor analysis.

## Result and Discussion

**Table 1: Demographic Profile of the Respondents**

Variables	Category	Frequency	Percentage
<b>Gender</b>	Male	247	41.2
	Female	353	58.8
<b>Age</b>	15-25	177	29.5
	25-35	287	47.8
	35-45	116	19.3
	45-55	15	2.5
	Above 55	5	.8
<b>Marital Status</b>	Married	327	54.5
	single	273	45.5
<b>Education</b>	Professional degree	75	12.5
	Post graduate	256	42.7
	Graduate	230	38.3
	Schooling	2	.3
	others	37	6.2
<b>Occupation</b>	Salaried	112	18.7
	Professional	271	45.2
	Business	125	20.8
	Homemaker	24	4.0
	others	68	11.3
<b>Family Income</b>	Below 250000	10	1.7
	250000-500000	95	15.8
	500000-750000	186	31.0
	Above750000	309	51.5

*Source: Authors' calculations based on primary data*

The data elucidated that out of 600 contributor, 41.2% (247) were male shoppers, while 353 (58.8%) were female vendee of sportswear. Women were keener in web purchasing of sportswear. It is transparent that only 29.5% (177 contributors) of the 600 contributors in this survey were in the age-range of 15-25, followed by 47.8% (287 contributors) were 25-35, followed by 19.3% (116 participants) were 35-45, while 2.5% (15



respondents) were 15, and above 55 years old belong to .8% (5 member) only. The survey unveiled that 54.5% (327 members) among 600 contributors were unmarried & 45.5% (273 members) were single.

The facts acquired after carrying out a survey of 600 participator revealed that the salaried segment was passionate concerning internet purchasing of sportswear, the figure was 18.7% (112 member). Professional group was highly wholehearted to shop sportswear online, the figure was 45.2% (271 contributor). While the figure of business group was only 20.8% (125 members) only. Followed by homemaker 4.0% (24 participants) only. Some participants belonged to some other profession, which was 11.3% (68 contestant) only. Individual whose earning was less than 250000 RS, they were not so interested in purchasing of Sportswear online, the figure was such individual was 1.7% (10 members) only. The number of persons whose money was 250000-500000, was 15.8% (95 members). Followed by 500000-700000 were 31.0% (186 participator) only. The respondents who were earning above 750000 per annum were 51.5% (309 contributors).

**Table 2: Favourite Brands of Sportswear**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Adidas	53	8.8	8.8	8.8
	Nike	200	33.3	33.3	42.2
	Reebok	171	28.5	28.5	70.7
	Puma	99	16.5	16.5	87.2
	Umbro	38	6.3	6.3	93.5
	Fila	39	6.5	6.5	100.0
	Total	600	100.0	100.0	

Source: Authors' calculations based on primary data

In the data mentioned above clarifies that number of participants who bought from Adidas was 8.8%, and the number of participants who bought from Nike was 33.3% only.

most of the participants were attracted by Umbro 6.3%, fewer people were impressed by Fila 6.5%.

### Factor Analysis

**Table 3: KMO & Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.734
Bartlett's Test of Sphericity	Approx. Chi-Square	3106.525
	df	91
	Sig.	.000

**Table4: Total variance explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.282	23.446	23.446	3.282	23.446	23.446	2.938	20.989	20.989
2	2.518	17.988	41.434	2.518	17.988	41.434	2.152	15.368	36.357
3	2.060	14.717	56.152	2.060	14.717	56.152	2.121	15.147	51.503

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
4	1.422	10.160	66.312	1.422	10.160	66.312	2.073	14.809	66.312
5	.818	5.842	72.154						
6	.734	5.246	77.400						
7	.617	4.407	81.808						
8	.490	3.502	85.310						
9	.453	3.235	88.545						
10	.417	2.978	91.523						
11	.365	2.607	94.130						
12	.341	2.437	96.566						
13	.320	2.283	98.849						
14	.161	1.151	100.000						

Extraction Method: Principal Component Analysis.

Source: Authors' calculations based on primary data

**Table 5: Rotated Component Matrix<sup>a</sup>**

	Component			
	1	2	3	4
Availability of variety & brands of product	.874			
Product specifications	.899			
Product pictures	.855			
Convenient Delivery	.685			
Advanced searching options		.757		
Branded Products		.867		
Terms & conditions		.773		
Cash on Delivery				.762
Competitive pricing				.804
Delivery process				.787
After sale service			.640	
24*7 services			.798	
Website language			.691	
Website navigation			.699	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Source: Authors' calculations based on primary data

This is an approach that is applied to minimize a vast number of variables into a small number of factors. As an indicator of all variables, researchers can apply this score for additional evaluation. The value of KMO is .734 & Bartlett's test is appreciable. This shows that Factor analysis is acceptable with specified data 14 variables have been reduced to 4 factors which depicts for 66.312% of the difference in the figure. Factor 1 consist of variety, product specification, product pictures, Convenient delivery, factor 2 consist of advanced searching options, Branded products, Terms & conditions, factor 3 consist of After sale service, 24\*7 services, product return, website language, website navigation. factor 4 consist of cash on delivery, competitive pricing, delivery process, Factor 1 is titled as Simplicity, Factor 2 is specified as Branded Apparel, Factor 3 is termed as website navigation, Factor 4 is specified as Economic Pricing.

### Findings

- Findings showed that Women are highly interested in online shopping of sports apparel (58.8%), while Men are interested in sports, games and outdoor activities. Nevertheless, this difference was found in the matter of web purchasing of Sportswear, which is quite interesting. Among the favourite brands of sportswear, people liked Nike brand (33.3%) the most.
- After this, people also liked the PUMA brand (28.5%) a lot. People also bought a lot of Reebok brand (16.5%) sports apparel, but Fila and Umbro brands (6.3%), (6.5%) still need a lot of advertising. The researcher examined online shopping behavior, including the frequency of sportswear purchases and consumers' payment method, and how much money people spend on purchasing sportswear in a month, and people's favourite shopping websites for sportswear.
- Findings disclosed that Online sportswear websites have to change their perception regarding trendy business. Now times have changed & people do online shopping of sportswear so that they can get more variety and favourite goods at one store in less time.
- Online sportswear sellers should always be in the good list of shoppers & they should present their product in such a way that the buyers do not find it overpriced and the sellers do not find it underpriced.
- Sportswear owners should adopt such strategies to influence more & more shoppers in selling their goods by giving more offer, discounts. So that buyers become more interested in purchasing sportswear online. Sportswear sellers of online stores should adopt such an approach that their existing customer switches to online mode, and they should also establish tie-ups with sellers on other e-commerce platforms to gain more customers and profits.

### Suggestions

- The Online sportswear industry should also focus on teenagers, presenting offers that attract teenagers to buy Sportswear. Furthermore, the e-commerce company should also target the Female consumers. E-commerce companies like Puma, Adidas, Umbro should do universal promotion and marketing and embrace some technique that effect buyer's perception in a serious way.
- these websites are especially performing their trade in sportswear categories. Nike is still the best choice for most costumers.
- E-commerce companies should adopt word of mouth technique so that their promotion and advertisement is maximum and people start shopping online from their website.
- Internet based websites are actually for industries, seller, and shoppers with their rapidly growing creative highlights. Accordingly, alliance must spread outstanding sites that give a higher online experience to pull in and hold their customer in the e-retail trade hub.

### Conclusions

Online purchasing has become a systematic act in people's everyday life; expansion of e-merchandise is a necessary condition to magnify the consumer understanding, answer to the unpredictability of shopper requirement and inspire other future buyers like internet explorer. Negative consequences may result in losing buyers forever and the impression of the store may be affected. The evaluation disclosed that in general, the standard of information and the diversity regarding conveyance options, between others, are the numerous key consideration that affect buyers in their buying selection of sportswear.

The research contemplates that brand inclination given for sportswear by the 600 respondents. It can be concluded that female participate more often in sports activities. Sports apparel is not bought regularly both online and conventional stores. Nike and puma were the most favoured brand for sportswear. Females are

continual online buyers when it comes to sports apparel. Elements that affect most when buying sportswear are comfort, Brand, customer service and pricing. Activewear can be bought in any season.

### **Limitation & Scope For Future Research**

This research emphasized on the consumer behavior of purchasing sportswear product via online medium. Limited Sample Size, Temporal Scope, Cultural context was the limitation of the study. This study is carried out only on Pune city, future study can be conducted on other Geographical area. This study considers only sportswear segment. Future research can consider on other segments like Ethnic wear, Formal wear, Casual wear, Western wear, post purchase conduct and so on. Future research can focus on other products or goods in place of sports apparel, which are easily available online now a days like electronics, cosmetics, accessories etc. Future study can consider the influence of online purchasing on conventional purchasing and the sustainability of conventional Stores.

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# Factors Affecting Adoption Intention of AI: A Comprehensive Review with Bibliometric Analysis

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## Abstract

Disruptive technologies such as the Internet of Things, big data analytics, blockchain, virtual reality, and artificial intelligence have significantly changed the ways in which businesses operate. Among these, artificial intelligence (AI) stands out as the latest technological disruptor with immense potential for marketing transformation. Despite this potential, there has been a lack of systematic efforts worldwide to organize existing AI research in B2C markets across various industries. This gap has spurred the need to establish a structured framework for AI adoption in B2C marketing and identify directions for future research. This study addresses this gap by conducting a comprehensive review of AI adoption research in the marketing discipline, employing a bibliometric analysis. This study systematically investigates the literature related to AI-enabled technology adoption in marketing and synthesizes state-of-the-art knowledge from 389 articles published between 2013 and 2023. The findings indicate a growing trend in the number of publications related to AI technology, especially after 2019. There is acceptance of new technology in different aspects of companies to enhance their value chain activities, with at least 100 publications per year after 2013. The results further reveal the most productive and influential journals, articles, authors, and countries in the field of AI technology across different industries. This study enriches the existing literature on technology acceptance in B2C marketing, offering a structured approach. It highlights five key areas that assist researchers and practitioners in evaluating their current AI usage and pinpointing future needs, enabling informed decisions on AI investments in relevant domains.

**Keywords:** Artificial intelligence, technology adoption, Adoption intention, innovativeness, Bibliometric analysis

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## Introduction

Statistics indicate that the companies' expenditure on AI-related investments in India will increase from \$665 million in 2018 to approximately \$11,781 million by 2025, indicating an increase of compound annual growth rate by 39% (Forbes, 2023). This increase in companies' expenditure on AI would mean that the value chains and systems of the companies are going to be modified. Therefore, AI influences the ways in which business is done.

The contribution of AI to the field of business is not only limited to the modified ways of doing business but it has started playing different types of roles that influenced many researchers to study AI in various B2B and B2C aspects. A review of the literature within this premise of different contributions of AI indicated that these studies were not only diversified but also scattered. There seem to be a lot of inconsistencies between how researchers perceive AI-related aspects and reality.

The review of literature also indicated that the research was heavily skewed toward AI and its contribution to B2B markets (Han et al., 2021; Chen et al., 2022) however, very limited research was found for B2C markets. It was further found that there was a lack of research that analyzed and structured the research related to AI in B2C marketing. This lack of structure, in turn, seemed to influence the B2C research as the new research was more overlapping rather than centered on pushing new boundaries. It was within this backdrop that the present study was undertaken.

The existing literature indicated different methodologies to meet the research objectives such as systematic literature review, bibliometric analysis, and meta-analysis. However, for the present study, bibliometric analysis has been preferred to comprehend and map the current state of knowledge and evolutionary nuances of the AI field. Therefore, the present study aims to present a state-of-the-art review of AI adoption research across industries and highlight potential areas for future research by providing a structure to the existing literature. The article is organized as follows: Section 2 provides a brief overview of AI. Section 3 outlines the research methodology of the study. Section 4 presents the findings of the study. Section 5 provides a brief conclusion of

the study. Section 6 highlights the potential areas of future research. Section 7 discusses the limitations of the study.

### **Artificial Intelligence**

The term “Artificial Intelligence” was originally coined by John McCarthy in 1955 during a workshop held at Dartmouth. Since then, it has evolved into a potential tool that enabled computer software to emulate human thinking and behaviour. It has been defined as “machines that simulate cognitive and affective functions of the human mind” (Russel and Norwig, 2016). In the current context, AI is perceived as a technology that has the ability to imitate human actions and complete tasks intelligently, showcasing its intelligencethrough cognitive, emotional, and social aspects.

A brief review of B2B literature found that existing researchers were working on a diverse array of dimensions for their complex dynamics. The actual deployment of AI applications within this context has provided a transformative lens to examine the interplay between various actors. Keegan et al. (2021) highlight how the priorities and motives behind AI adoption configure power dynamics among focal firms, AI suppliers, and tech giants. Other researchers like Paschen et al. (2019), Kumar et al. (2020), and Han et al. (2021) explored the technological innovations shaping B2B marketing. Paschen et al. (2019) shed light on how AI can enhance B2B marketing by improving information sharing through a knowledge management approach. Additionally, Chen et al. (2022) explore different types of AI and their effects on B2B marketing, revealing the various ways AI transforms the field. Beyond operational benefits, Bag et al. (2020) emphasize AI's capacity to enhance knowledge creation and rational decision-making in B2B interactions that directly impact the overall company performance. Therefore, it is seen that B2B research was exhaustively done by many researchers.

A similar attempt to review the B2C literature indicated that the studies have explored the integration of AI within CRM systems to enhance B2C relationships (Chatterjee, 2022), the impact of social robots on human lives (De Keyser & Kunz, 2022), the role of AI algorithms in shaping consumer adoption behaviour in the banking sector (Hentzen et al., 2022), and user attitudes towards different types of AI-based technologies like virtual personal assistant devices (Yang & Lee, 2019). However, there is a noticeable absence of comprehensive and structured research that focuses on how AI applications can be used in the context of B2C marketing. It is pertinent to note that the frequency of structured B2C research was very less as compared to B2B, with the former exhibiting overlapping themes that lack a distinct concentration for future exploration. As a result, past researchers are not systematically pushing the boundaries so that it can be integrated and practical implications in this space have become apparent.

It was within this backdrop, the present study was undertaken for B2C marketing with a focus on providing structure to the existing literature on the Adoption of AI through bibliometric analysis. The research methodology used for the present study is discussed in the next section.

### **Research Methodology**

To comprehend and structure the current knowledge on the adoption of AI across different industries, bibliometric analysis was conducted. There are two distinct reasons for using bibliometric analysis. Firstly, it possesses the capacity to effectively handle vast volumes of bibliographic data, and Secondly, it aids in the impartial identification of influential research work within the respective field" (Zupic & Cater, 2015; Donthu et al., 2021). To conduct the analysis, a methodology proposed by Donthu et al. (2021) has been adopted. The methodology provided a four-step procedure as follows:

- Defining the aim and scope of the study
- Choosing the techniques for bibliometric analysis
- Defining the search terms, database and data
- Running and reporting the findings of the analysis

The detailing of a four-step procedure is discussed in the following section.

The aim of the present study is to provide a thematic structure to the existing literature on the adoption of AI research. In order to sort the structure, the objectives of the present study were broken down into four research stages.

**RQ1:** What are the current publication trends (number of articles by year) in adoption of AI across industries?

**RQ2:** What are the most influential publications (journals, articles) related to adoption of AI across industries?

**RQ3:** Who are the most productive and influential contributors (authors, countries) in adoption of AI research across industries?

**RQ4:** What are the existing themes (conceptual structure) of AI adoption across different industries and what are the potential future research areas in the field?

In an effort to limit the study's scope, an intensive analysis of existing scholarly work was done. The analysis revealed that the majority of bibliometric articles proposed the 10-year analysis for studies (Sweileh et al., 2017; Forliano et al., 2021; Gao et al., 2021). Therefore, the review period for the study was confined to 10 years, spanning from 2013 to 2023 for three primary reasons, i) the suitability of a 10-year duration, ii) a substantial number of articles were available within this timeframe, and iii) less than 100 articles per year before 2013 and a notable increase after 2013.

The next step is to identify the pertinent keywords to search bibliometric data. For the present study, the first 15 articles related to AI and its adoption in management from Google Scholar was used. A content analysis of these 15 articles indicated that the most repetitive keywords were 'Artificial intelligence', 'technology adoption/innovation adoption', and 'Adoption intention/intention to use' from the list of keywords. Therefore, it was decided to use these top three keywords to search for the relevant literature.

After shortlisting the keywords, the next step is to shortlist the appropriate database for analysis. Three different databases were considered for the present study namely Scopus, Web of Science, and EBSCO. Out of these three databases, a review of literature indicated the Scopus database is one of the best databases for the bibliometric review search as it provides a more extensive range of scholarly information (Kumar et al., 2022; Tiwary et al., 2021; Xu et al., 2018). Therefore, the bibliometric data for the present study were retrieved from the Scopus database. The search query applied was: (( TITLE-ABS-KEY ("adoption intention") OR TITLE-ABS-KEY ("intention to use") OR TITLE-ABS-KEY ("intention"))) AND (( TITLE-ABS-KEY ("AI") OR TITLE-ABS-KEY ("Artificial intelligence") OR TITLE-ABS-KEY ("AI technology"))).

The initial search yielded a total of 523 articles (as of March 2023), published between 2013 and 2023. Multiple filters were applied in order to refine 523 articles. Based on the previous bibliometric studies, the articles were filtered for their "subject area", "document type", "source type", and "language" in the Scopus database. The subject area was limited to "Business, Management, and Accounting" and "Social Sciences". The source type and document type were limited to "Journal" and "Articles", respectively, as journal articles are subjected to rigorous peer-review, and thus ensure the quality of research findings. Finally, the language was limited to "English" due to translation issues. The filtration process, involving the removal of misspelled, incomplete, and irrelevant elements, resulted in a final selection of 389 articles for the present study (Table 1).

**Table 1: Selection process of articles from 2013 to 2023**

Review period	2013-2023	No. of articles
Database	Scopus	
Keywords	"artificial intelligence", "AI technology", "adoption intention", "intention" and "intention to use"	3618
Filters	<b>Subject area:</b> Business, Management, and Accounting & Social Sciences	430
	<b>Document type:</b> Articles	
	<b>Source type:</b> Journal	
	<b>Language:</b> English	
Omitted cells	misspelled, incomplete and irrelevant elements	41
<b>Articles for Final analysis</b>		<b>389</b>

Source: Authors' own elaboration

The last step in methodology is related to running and finding the analysis, therefore, for the present study, a biblioshiny application (R software, version 4.2.2) has been used to conduct the bibliometric analysis. The detailed analysis of the findings of the study is discussed in the next section.

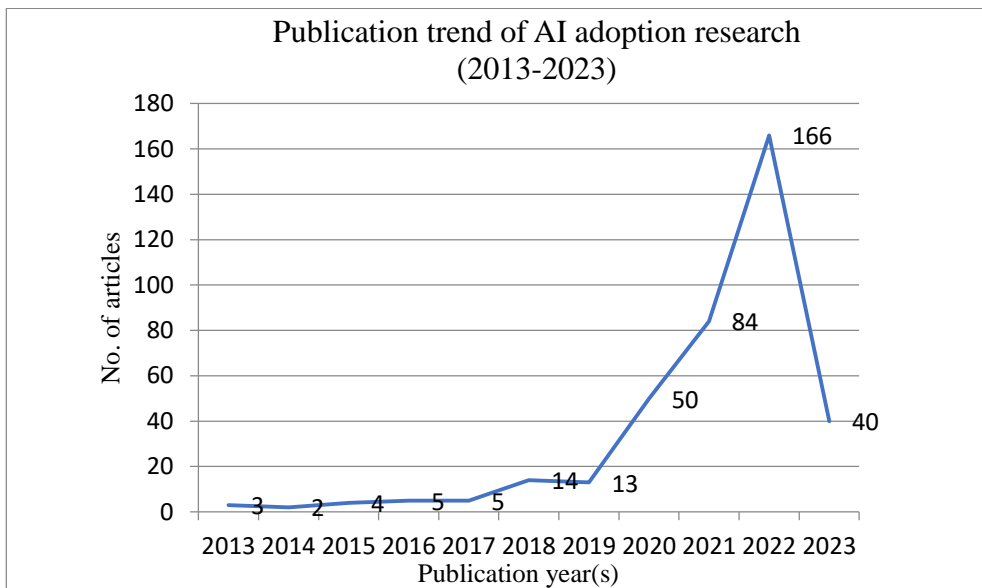
### Analysis

Bibliometric analysis analyzes the data in four different aspects, namely, publication trends, publication performance, contributor performance, and conceptual structure. It is pertinent to note that the biblioshiny application used different techniques such as performance analysis for publication trend, citation analysis for publication and contributor performance, and co-word analysis for conceptual structure. Therefore, for the present study, these particular techniques were used in order to comprehend and map the structure of existing literature on AI adoption in different industries. The following sub-sections present the results of the analysis, addressing each one of the four aspects of bibliometric analysis.

### Publication Trend



To analyze the publication trend related to the AI adoption in business articles over a period of ten years (2013-2023), a publication performance technique was used. The analysis indicated a growing trend of AI adoption research across different industries. The majority of publications were started from 2013; however, there was a significant shift in AI-related publications only after 2019. A manual analysis of the articles published from 2013 to 2018, indicated that the maximum work done in AI-related aspects was published by other than



**Fig 1: Publication trend**

Note: \* publications are till March 15, 2023

Source: Authors' representation

Marketing disciplines, whereas, the publications from 2019 to 2023 highlight the huge growth of publications that can be attributed to the replacement of old management tools with new aspects of technology like artificial intelligence in organizations was published by marketing as well as other than marketing disciplines.

### **Publications' performance**

The second stage in bibliometric analysis was to analyze the publications' (journals and articles) performance using citation analysis by biblioshiny application. The results of the analysis are discussed in the following two sub-sections, namely, journal performance and article performance.

#### ***Journal performance***

The journal performance was analyzed on the basis of a list of 389 articles that were retrieved from the Scopus database. The results of the analysis indicated that these articles were distributed across 223 sources (journals). A manual review of the journal titles indicated that out of 223 journals, 44 journals were from the marketing discipline; and 179 journals were from disciplines like engineering, sustainability, tourism, statistics, etc and these have been clubbed as "other than marketing journals" for the analysis purpose. Additionally, it was noticed that 87 publications out of 389 were published in 44 marketing journals over the period of 2013 to 2023 whereas the remaining 302 were published in 179 other than marketing journals which indicates the application of AI and AI-based research is in a nascent stage in marketing.

Furthermore, an analysis found that Sustainability (Switzerland) (29 articles) and Technological Forecasting and Social Change (13 articles), which are related to other than marketing journals were the most popular journals for publishing AI and AI-related work, whereas Psychology and Marketing (11 articles) and Journal of Business Research (11 articles) are related to marketing journals (table 2). The majority of the journals in the top 10 journal's list also fell into the A\* or A category.

A content analysis of the marketing discipline journals was undertaken to identify the aspects in which top-cited journals have been working. It revealed that the majority of articles published were trying to analyze mainly three aspects, i) impact of human-to-human and human-to-machine interactions on the continuation of usage of AI technologies, ii) scale development process for AI-chatbot service quality, and iii) investigates the factors and psychological traits that affect the AI decision-making process and engagement levels. The literature also indicated that the majority of articles in marketing journals were using models such as the humanness value

loyalty model, valence perception theory, media richness theory, SOR model, BRT theory, realism maximisation theory, innovation diffusion theory, TAM model and flow theory as a theory development base.

**Table 2: Top 10 Marketing and other Journals**

Marketing Journals			Other Journals		
Journals (Rating as per ABDC list)	Total Citations	Total articles	Journals (Rating as per ABDC list)	Total Citations	Total articles
Psychology And Marketing (A)	231	11	Business Horizons(B)	490	2
Journal Of Retailing And Consumer Services (A)	194	7	Sustainability (Switzerland) (A)	411	29
Journal Of Business Research (A)	137	11	International Journal Of Information Management (A*)	373	5
Journal of Hospitality marketing and management (A)	96	1	Tourism Management(A*)	336	3
Australasian Marketing Journal (A)	72	1	Accident Analysis And Prevention (A*)	315	3
Journal Of Marketing Management (A)	66	3	Knowledge-Based Systems(A)	273	2
Journal Of Marketing (A*)	54	9	Transportation Research Part C: Emerging Technologies(A*)	219	1
Journal Of Service Management (A)	49	3	Technological Forecasting And Social Change (A)	211	13
Journal Of Research In Interactive Marketing (B)	28	3	Artificial Intelligence (A1)	139	10
International Journal Of Bank Marketing (A)	21	4	International Journal Of Contemporary Hospitality Management (A)	129	3

Source: Authors' own elaboration

An analysis of articles from other than marketing discipline journals indicated that the majority of work was related to the aspects, i) factors nurturing virtual flow experiences between customers and different types of AI technologies, ii) importance of AI in managing risk and customer service landscape, and iii) the developing field of robot journalism.

After comparing journals of marketing discipline with the other disciplines, it becomes evident that despite their different scopes, there are common thematic threads that connect them. Notably, both disciplines share a primary focus on exploring the factors influencing the adoption of artificial intelligence (AI), within distinct contexts.

In the realm of marketing journals, research examines the factors such as perceived value, risk barriers, trust, continuance intention, social influence, and price value. Conversely, studies in other than marketing journals centered on factors like ease of use, hedonic motive, trust, performance expectancy, effort expectancy, and behavioural intention. Therefore, it is pertinent to note that the scope of these two disciplines is significantly different and cross-disciplinary integrated studies are required in the field to push the boundaries in a centered way

### **Articles Performance**

An article's performance was done using citation analysis, measured by two types of citations: local citations and global citations. The local citations refer to the inter-citation among articles in the review corpus (e.g., 389 articles that were retrieved from the Scopus database), while global citations refer to the number of citations that an article receives from within and outside the review corpus (Kumar et al., 2021). For the present study, biblioshiny application (R software, version 4.2.2) did not retrieve any local citations however, the global citations indicated that the highest number of citations i.e., 445 global citations were received by one article out of 389, written by Jarrahi M. H. in 2018 focused on the effects of human-to-human and human-to-machine interaction in organizational settings in the context of services. In addition, out of the remaining 388 articles, 91

articles depicted zero global citations. It was further found that out of 91, 80 articles were recently published from 2022 to 2023 and it takes some time to influence with a good number of global citations. The content analysis of other 11 articles out of 91 indicated that they did not provide exhaustive information in terms of methodologies, analytical tools, and analysis due to which their intense was suffering, thereby indicating that the comprehensive style of research paper was very important to generate the citations.

In order to draw more conclusions about the article performance analysis, the top 10 influential articles were extracted based on global citations. A content analysis of these top 10 globally cited articles indicated that they could be grouped into five thematic categories by the researcher. It seems that two were in group-1, five were in group-2, and one each in the rest of the three groups, indicating that most researched category as of now was factors affecting adoption intention of AI. It is pertinent to note that articles in group-2 were published by both marketing as well as other than marketing journals.

Furthermore, many researchers were also interested in AI ethics and human-machine collaboration. Out of 389 articles, approx. 6 percent of articles related to human-machine interaction and approx. 2.5 percent of articles related to AI ethics were published after 2020 in addition to the factors-related articles.

An in-depth analysis of five articles in group-2 presents a theme of “Factors affecting adoption intention of AI”, and examines the factors such as, perceived usefulness (PU), perceived ease to use (PEU), perceived trust (PT), social influence (SI), service assurance (SAR), empathy (EPM), personal engagement (PENG), perceived value (PV), information sharing (ISR), subjective norms (SN), perceived behavioural control (PBC), parasocial relationship (PSR), perceived risk (PR), technology attributes, perceived intelligence, anthropomorphism, and perceived animacy. This field explored different theoretical models and factors which were influenced the adoption and acceptance of AI across different industries.

**Table 3: Top 10 most cited AI-based articles**

Themes	Article title	Author(s)	Global Citations
Human-technology symbiosis	Artificial Intelligence and the Future of Work: Human-AI Symbiosis in Organizational Decision Making	Jarrahi, 2018	445
	Hotel employee's artificial intelligence and robotics awareness and its impact on turnover intention: The moderating roles of perceived organizational support and competitive psychological climate	Li et al., 2019	170
Factors affecting adoption intention of AI	Consumers acceptance of artificially intelligent (AI) device use in service delivery	Gursoy et al., 2019	256
	An empirical investigation on consumers' intentions towards autonomous driving	Panagiotopoulos & Dimitrakopoulos, 2018	219
	Leveraging Human-Robot Interaction in Hospitality Services: Incorporating the Role of Perceived Value, Empathy, and Information Sharing into Visitors' Intentions to Use Social Robots	De Kervenoael et al., 2020	156
	Psychosocial factors associated with intended use of automated vehicles: A simulated driving study	Buckley et al., 2018	141
	Understanding adoption of intelligent personal assistants - A parasocial relationship perspective	Han & Yang, 2018	127
Review paper	Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review	Sima et al., 2020	150
AI Ethics	From What to How: An Initial Review of Publicly Available AI Ethics Tools, Methods and Research to Translate Principles into Practices	Morley et al., 2020	148
Imbalanced datasets & machine learning	Analysing the classification of imbalanced data-sets with multiple classes: Binarization techniques and ad-hoc approaches	Fernández et al., 2013	273

Source: Authors' own elaboration

Therefore, the results of the article performance analysis indicated that writing style as well as its area is very important to gaining positioning in the field. An article had to be comprehensive and detailed in order to generate citations. The plausible future areas for research are to explore the following, i) impact of three ways of interaction (AI, manual, human-to-machine) into the different contexts of marketing, ii) ethical implications of AI, and iii) different types of factors which influence the AI continuance intention across industries.

### Contributors' Performance

After analyzing the publications' trend and performance, the subsequent stage in bibliometric analysis related to the contributors' (authors' and countries') performance. For the present study, contributors' performance has been measured in terms of productivity and citations which in turn have been measured by the number of articles published by an author/a country and the total number of citations achieved by an author/ a country, respectively. The results of the contributors' performance analysis are discussed in the following two sub-sections, namely, author performance and country performance.

#### Author performance

In order to evaluate the author's performance, the review corpus of 389 articles was analyzed, and found that these articles were authored by a total of 1163 authors. Among these articles, 42 were identified as sole authored publications, while the remaining 347 publications were published by 1121 authors collectively. This suggests that an average of 3 authors per publication, thereby indicating that this field employed a cross-disciplinary and co-authored approach.

Furthermore, author's performance was analyzed in detail on the basis of two aspects, namely, productivity and citations. The results of the productivity analysis of 389 articles indicated that Dwivedi Y. K. was the most productive author in this field, with 11 publications in the period of 2020 to 2023 (Table 4). Also, all 11 publications of Dwivedi Y.K. were co-authored, and two of his co-authors, namely, Pillai R. and Siwathanu B. were featured separately in the most productive authors list with 6 articles each from 2020 to 2023 respectively. These articles have been published in both reputed marketing journals and other than marketing journals. Their primary focus has been to investigate the key motivators for both consumers and managers in adoption of different types of AI-based technologies across various industries. Additionally, they addressed consumer privacy concerns related to AI in studies.

The results of citation analysis highlight the most influential author in the particular field indicating that Jarrahi M. H. was the most influential author with only one publication related to "Human-AI Symbiosis in Organization". It gained 445 citations between 2018 and 2023 by focusing on the idea of "intelligence augmentation" which means AI systems should be designed with the intention of augmenting, not replacing human contributions, thereby indicating that it is one of the base papers of research in this area. The other influential authors in this field are Gursoy D. (421 citations, 4 publications), Chi O.H. (391 citations, 3 publications), Del Jesus M. J. (273 citations, 1 publication) and Dwivedi Y.K. (292 citations, 11 publications), followed by Jarrahi M.H. (445 citations, 1 publication). A content analysis of their articles indicated that the influential authors were mainly focused on understanding the factors or motivations that influence consumer attitudes towards AI across different industries.

**Table 4: Most Productive and Influential authors**

Most Productive Authors (with more than three articles)			Most Influential Authors	
Authors	Publication start year	No. of Publications	Authors	Total Citations
Dwivedi Y. K.	2020	11	Jarrahi M. H.	445
Kim J.	2021	6	Gursoy D.	421
Pillai R.	2020	6	Chi Oh	391
Siwathanu B.	2020	6	Dwivedi Y K	292
Casalo L. V.	2021	6	Del Jesus M. J	273
Flavian C.	2021	4	Fernández A.	273
Gong Y.	2021	4	Galar M.	273
Gursoy D.	2019	4	Herrera F.	273
Lee S.	2020	4	Lopez V.	273
Lu Y.	2021	4	Lu L.	256

Source: Authors' own elaboration

Therefore, a contributor performance analysis indicated that though Dwivedi Y.K. was the most productive author with 11 publications in the time frame of 2020 to 2023, Jarrahi M. H. was the most influential author with only one publication published in 2018 and achieved 445 citations. The focused area for Dwivedi Y.K. was to explore the factors influencing AI adoption whereas Jarrahi M.H. focused on the integration of humans and machines in service context, thereby indicating that the productive author as well as influential author was working in the key areas of AI as indicated in table 3. In addition, there was no article related to AI ethics in the top 10 cited authors list which indicates that though it is an emerging area but has traditionally been a neglected area, so, future researchers should explore and push the boundaries of this area in addition to human-machine integration and factors affecting adoption intention of AI in detail.

**Country’s performance**

In order to evaluate the country’s performance, the review corpus of 389 articles was analysed, and found that these articles were published by a total of 60 countries. It was analyzed in detail on the basis of two aspects, namely, productivity and citations. The results of the productivity analysis based on their affiliations of corresponding authors China was the most productive country in the field of AI adoption studies, with 69 publications. Interestingly, out of 69, 50 were single-country production and 19 were related to multi-country production (Table 5). A content analysis of 69 articles published by China primarily focused on antecedents and consequences of usage of AI across diverse industries. The results further indicated that the USA (n=42), Korea (n=36), and India (n=27) were the second, third, and fourth most productive countries in the field, respectively.

**Table 5: Most Productive and Influential countries**

Most productive countries (with 8 or more articles)				Most influential Countries	
Country	No. of Articles	Single Country Production	Multiple Country Production	Country	Total citations
China	69	50	19	China	868
USA	42	34	8	United Kingdom	604
Korea	36	26	10	USA	533
India	27	22	5	Korea	465
United Kingdom	20	2	18	Spain	401
Spain	11	9	2	India	362
Australia	9	4	5	France	282
France	9	2	7	Australia	257
Malaysia	9	4	5	Mauritius	256
Germany	8	7	1	Greece	252

Source: Authors’ own elaboration

The results of the citation analysis highlight the most influential country indicated that China was the most influential country in terms of their impact on the field and generated 868 citations across 69 publications, followed by the UK with 604 citations across 20 publications, and the USA with 533 citations across 42 publications (Table 5). These statistics indicated that both developed and developing countries were contributing to the field in terms of impact on the field, but one of the developing countries (China) had the upper hand in both productivity and citation analysis. Therefore, an attempt was made to identify the areas in which developed countries and developing countries were working in order to have a greater influence. For this, a content analysis of the articles published by the two developed countries (i.e., USA and UK) and three developing countries (China, Korea, and India) in the list of the top ten influential countries was done. The results of the analysis indicated that the developing countries were working on software integration's impact on new learning apps, the recruitment process, and role of ethics and values in consumers’ intention to use AI technology. They also explored the impact of different types of AI technology on consumer perception and engagement across different industries while developed countries investigated the interaction of humans and machines for enhanced consumers and employees experiences in service settings, the application of AI in healthcare and aviation industries, and how digitalization influences the decision-making of different users. The developed countries mainly relied on experimental studies, while developing ones concentrated on quantitative research studies.

Therefore, the country’s performance analysis shed light on a prevalent trend of usage of AI technologies across different countries and highlighted that China was the most productive as well as influential country in this particular field. Based on the content analysis, it can be argued that both developed and developing countries were working on similar themes such as exploring the factors that influence the acceptance of AI, integration of

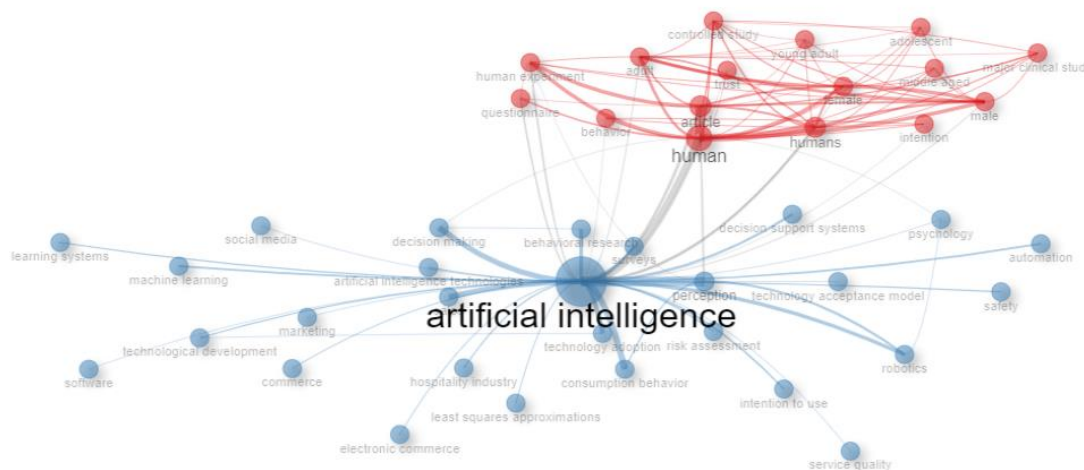
humans with technology, and AI ethics by focusing on different industries. To increase the influence of their work, developed countries could explore and investigate the emerging area of AI with quantitative studies, and developing nations should concentrate on validating the ideas put forth by developed nations. In addition, there is a need to improve the research field in specific countries by focusing on unique cross-cultural aspects, on which other countries have already taken the lead from 2013 to 2023. As the field of AI research continues to expand into different industries, future researchers are encouraged to not only focus on the technical aspects but also to consider the impact of diverse cultural contexts. They can also explore how various cultural perspectives intersect with research themes to offer valuable insights and contribute to a more comprehensive understanding of AI's implications across the globe.

### Conceptual structure

The fourth stage in bibliometric analysis was to explore the conceptual structure of AI adoption research from a review corpus of 389 articles using co-word analysis by biblioshiny application. This conceptual structure attempts to establish the link between different concepts in the research field. For the present study, two science mapping techniques namely, keyword co-occurrence analysis and thematic map analysis were used to build the structure. Their results are discussed in two sub-sections, namely, keyword co-occurrence analysis and thematic map analysis.

#### Keyword Co-occurrence Analysis

In order to analyze the co-occurrence of keywords to build the conceptual structure, a review corpus of 389 articles was used. This analysis examines the actual content of the articles in terms of words that are often derived from authors' keywords. These words were then assembled into clusters based on their thematic similarities, thereby allowing researchers to identify relevant themes within different clusters that have gained substantial attention. Therefore, the present study performed a keyword co-occurrence analysis of those authors' keywords that had appeared at least three times (n=48).



**Fig 2: Keyword co-occurrence analysis**

**Notes:** The circle represents the keyword. The lines between the circles represent the co-occurrence of the keywords and the width of the line represents the number of co-occurrence of the keywords. The closeness of circles represents the degree of association of keywords, wherein the closer the circles, the greater the association of keywords. The colour represents the cluster to which a keyword belongs.

The results of analysis (Fig 2) indicated that co-occurred keywords could be clustered into two clusters (represented by different colors), wherein keywords in each cluster represent a theme on which AI research in different industries was being conducted. Consequently, the two identified clusters are concluded in detail.

#### Cluster 1 (Blue color): Factors affecting the acceptance of AI

The analysis of keywords in cluster 1, represented (fig 2) with blue color, indicates that the research in AI field were trying to focus on different types of factors that directly or indirectly influence the acceptance or adoption intention of AI in various contexts. In real practice, the acceptance of AI is still in its infancy stage due to its harsh impact on employee performance and turnover (Jarrahi, 2018); cognitive and emotional state (Rodgers et al., 2021; Zhu et al., 2023); democratic integrity (Bazarkina & Pashentser, 2020; Sharma et al., 2023); and consumer information disclosure (Kronemann, 2023). Additionally, different researchers examine the different concepts as drivers or motives such as emotional creepiness, personalableness perception, and perceived fairness

(Kochling & Wehner, 2022); parasocial interaction, perceived usefulness, and perceived ease of use (Cheung et al., 2020; Park & Kim, 2023); perceived agency and perceived experience (Sullivan et al., 2022); generativity, openness, entrepreneurial orientation, technology orientation, and business innovativeness (Upadhyay et al., 2023); credibility (Cheung et al., 2020); perceived risk (Pan et al., 2019; Shi et al., 2021; Gupta et al., 2021; Atwal et al., 2021; Lee & Chen, 2022); management support and competitive pressure (Hmoud, 2021); performance expectancy, social influence, and perceived benefits (Upadhyay et al., 2022); organizational readiness, trust, reliability, and perceived socialness (Hsieh & Lee, 2021; Mclean et al., 2021; Meriouchi et al., 2023).

Furthermore, a content analysis suggested that the actual usage of AI was not limited to one sector; different researchers were trying to broaden the scope of AI technologies across different industries such as manufacturing, hospitality, e-commerce, healthcare, customer service, banking, robo-advisories, robot journalist, educational institutions, etc. The increasing role of AI in different aspects was explored with the help of some theoretical models of decision-making theories, TAM, humanness value loyalty model, SOR framework, BRT theory, realism maximisation theory, innovation diffusion theory, flow theory, and theory of mind perception.

#### *Cluster 2 (Red color): Interaction of Humans and Technology*

The analysis of keywords in cluster 2, represented (fig 2) with red color, mainly focuses on human-related aspects. It depicts the collaborative role of humans and technology innovation, wherein researchers found that AI significantly changed the overall work perspective of human lives. The rise of an alliance between humans, AI, and human-machine shifts the vision of work into creativity and provides valued outcomes across industries.

A thorough analysis of various studies (Jarrahi, 2018; Li et al., 2019; Balakrishnan & Dwivedi, 2021; Kim et al., 2023) reveals that they examined the consequences (positive or negative) of integration between humans and machines on different aspects of society. Also, they attempted to examine whether there is a difference in human-human interaction or human-machine interaction in shaping customer engagement. The manual analysis of their content highlighted that AI and humans possess different but complementary capabilities essential for effective decision-making, and they also considered it as one of the most disruptive forces in the business landscape in the coming years.

Furthermore, researchers concentrated on how the users' psychological and personality factors affect the selection of chatbots or similar assistants to perform tasks through technology in different settings (Jin & Eastin, 2023; Belunche et al., 2021; Dwivedi et al., 2020). Among these factors, trust is one of the crucial psychological factors, relying on three dimensions for users, namely, performance, process, and purpose (Park, 2020), which helps them in building the service value expectations. Likewise, other unexplored factors in various contexts need to be explored for broadening the field of AI.

Therefore, the keyword co-occurrence analysis indicated the two pre-dominant themes, i) exploring factors and consequences Related to AI Acceptance in Organizational Aspects, and ii) the impact of human and machine interaction, among researchers. These identified themes closely align with the key areas that were outlined in Table 3 of the present study. Consequently, future researchers need to explore the relatively less-explored facets of AI-driven factors namely, perceived anthropomorphism, perceived animacy, perceived intelligence, organizational fit, perceived value, service quality, customer satisfaction, customer value, and personal concerns. They also need to emphasize on the emerging concept of human-machine integration. It involves a deeper exploration of how humans and machines can collaborate seamlessly and effectively to enhance decision-making, productivity, and overall organizational performance.

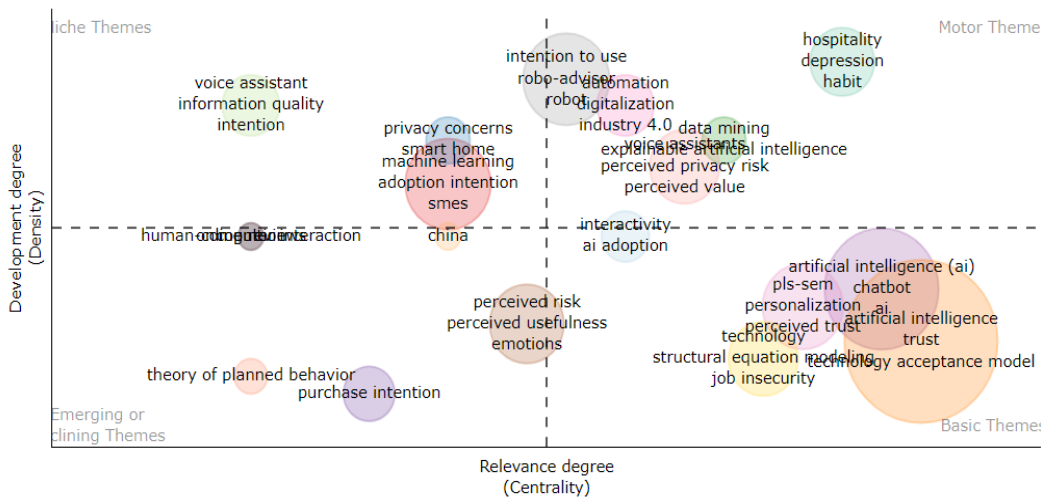
#### ***Thematic Map Analysis***

In order to identify current themes or future aspects related to the AI research field, the present study performed a thematic map analysis. Thematic maps are identified based on their centrality (plotted on the X-axis) and density (plotted on the Y-axis). Centrality measures the level of inter-cluster interactions, indicating how extensively a topic is connected with others and holds significance within a specific domain. On the other hand, density measures the level of intra-cluster cohesion, specifically assessing the interconnectedness of keywords within a given cluster, thereby forming a thematic concept. The map highlights the themes based on their quadrant placement: (1) Q-1: motor themes; (2) Q-2: basic themes; (3) Q-3: emerging or disappearing themes; (4) Q-4: very specialized/niche themes. The results of the thematic map analysis indicated the four quadrants (Fig3) that were focused on present and future research related to AI acceptance in different aspects.

The first quadrant (Motor-themes), indicated by the high density and centrality in the research field, the biblioshiny application identified five different clusters. The first and second cluster demonstrates a high degree of inter-cluster interaction, primarily including concepts such as robo-advisors, automation, digitalization, and industry 4.0, and intention to use. The third and fourth clusters are also indicate a significant degree of relatedness between concepts such as data mining, voice assistant, explainable artificial intelligence, perceived

risk, and perceived value. The fifth cluster exhibits independent concepts which are intra-connected such as hospitality, depression, and habit, each with its influential impact on the field.

**Fig-3: Thematic Map Analysis**



The second Quadrant (Basic themes), indicated by high centrality but low density, these topics hold importance for future research as they had low density in the research field. This quadrant depicts five clusters in it. Out of five, four clusters revealed high inter-connectedness as well as intra-cohesion and included concepts such as job insecurity, personalisation, trust, technology, techniques like SEM, chatbot, and theories like TAM. One remaining cluster contains concepts such as interactivity and AI adoption.

The third quadrant (Emerging or disappearing themes), indicates the topics that have been used but are on a declining trend, indicated by low centrality and density. This region exhibits five clusters. All five clusters revealed low degree of relatedness between clusters. The different concepts in all five clusters include the theory of planned behaviour, human-machine interaction, purchase intention, china, perceived usefulness, risk factor in technology, and emotions.

The fourth quadrant (Specialized/niche themes) focuses on the specific and under-represented topics which are not able to influence other researchers. This is indicated by high density but low centrality, identified three clusters out of which two clusters exhibit a high degree of correlation between them. The inter-connected clusters indicate the concepts such as privacy concern, smart home, machine learning aspect, adoption intention, and SMEs. The remaining cluster contains concepts like information quality, voice assistant, and intention.

Therefore, the thematic mapping analysis revealed different clusters in four regions, each shedding light on different concepts and their intense within the field. The clusters identified in the first and second quadrants are closely related to the key area of factors affecting adoption intention of AI, as outlined in Table 3. In the third quadrant, one of the clusters highlights the emerging theme of consequences arising from the integration of human and machines. Meanwhile, the fourth quadrant is linked to privacy concerns while using AI technologies, signifying the ethical perspective of AI. These key areas require further exploration in future research so that the emerging themes can gain more influence and pave the way for broader advancements within the field.

**Conclusion**

The present study aimed to present a state-of-the-art review of AI research in different industries and highlight potential areas of future exploration by providing a structure to the existing literature. In order to achieve this objective, a bibliometric analysis of the 389 articles on AI adoption that were published between 2013 and 2023 in the Scopus database was done. The results indicated a growing trend in the number of publications on AI across various industries, especially after 2019.

The publications' performance analysis indicated that the research on AI can be published in marketing as well as other than marketing journals like Sustainability (Switzerland) (29 articles) and Technological Forecasting and Social Change (13 articles) were the most popular other than marketing journals, whereas Psychology and Marketing (11 articles) and Journal of Business Research (11 articles) are related to marketing journals, by focusing on exploring the factors, namely, perceived value, risk barriers, trust, continuance intention, social



influence, and price value, ease of use, hedonic motive, trust, performance expectancy, effort expectancy, and behavioural intention. It is pertinent to note that the scope of these two disciplines is significantly different and cross-disciplinary integrated studies are required in the field to push the boundaries in a centered way. In addition, the writing style as well as its area is very important to gain positioning in the field. An article had to be comprehensive and detailed in order to publish the article and generate citations.

Furthermore, the contributors' performance analysis indicated that though Dwivedi Y.K. was the most productive author with 11 publications in the time frame of 2020 to 2023, Jarrahi M. H. was the most influential author with only one publication published in 2018 and achieved 445 citations. The focused area for Dwivedi Y.K. was to explore the factors influencing AI adoption whereas Jarrahi M.H. focused on the integration of Human and machines in service context, thereby indicating that the productive author as well as an influential author was working in the key areas of AI. In addition, there was no article related to AI ethics in the top 10 cited authors list which indicates that though it is an emerging area but has traditionally been a neglected area.

In terms of contribution by countries, both developed and developing countries were contributing to the field in terms of impact on the field, but one of the developing countries (China) had the upper hand in both publications and citations. Therefore, based on the content analysis it can be argued that both developed and developing countries were working on similar themes by focusing on different industries. To increase the influence of their work, developed countries could explore and investigate the emerging area of AI with quantitative studies, and developing nations should concentrate on validating the ideas put forth by developed nations.

In the last stage of bibliometric analysis, the thematic mapping analysis revealed different clusters in four regions, each shedding light on different concepts and their intense within the field. The clusters identified in the first and second quadrants are closely related to the key area of factors affecting adoption intention of AI, as outlined in Table 3. In the third quadrant, one of the clusters highlights the emerging theme of consequences arising from the integration of humans and machines. Meanwhile, the fourth quadrant is linked to privacy concerns while using AI technologies, signifying the ethical perspective of AI. These key areas require further exploration in future research so that the emerging themes can gain more influence and pave the way for broader advancements within the field.

### **Future Directions**

Based on the findings of the study, several gaps in the existing literature on AI adoption emerge as potential future research areas. Firstly, future studies could examine the role of less-explored factors, namely, perceived anthropomorphism, perceived animacy, perceived intelligence, trust, risk, organizational fit, perceived value, service quality, customer satisfaction, customer value, and personal concerns. These factors can be explored across different sectors to comprehend how they influence the acceptance of AI-based technologies from the perspective of customers as well as employees.

Secondly, to establish additional studies that will focus on the symbiotic relationship between humans and technology. These studies should comprehensively examine both positive and negative consequences to get substantial influence within the field.

Thirdly, the prospect of longitudinal studies over the cross-sectional studies could be pursued, with varying levels of analysis (industry, organization, and individual) to comprehensively investigate the drivers of AI adoption.

Fourth, by addressing the gap between developing and developed countries, future researchers could undertake cross-cultural quantitative studies so that their generalizability increases.

Fifth, the application of AI and its ethics to reduce the potential dark sides within marketing domain constitute a distinct emerging research area. This particular aspect of consequences of AI has yet to receive comprehensive attention and offers a rich area for future investigation.

### **Limitations**

Despite the various theoretical implications of the study, the present study has some limitations about its methodology. First, the data for the study was retrieved only from the Scopus database. Although the usage of Scopus in the present study has been justified, there may be chances of missing some articles that have been published in journals that are indexed in other databases such as Web of Science and EBSCO. Therefore, future reviews on AI should try to incorporate the articles published in these journals to support or refute the findings of the present review. Second, the present study reviewed only those publications that are in the form of articles. Consequently, other forms of publications, such as conference papers and book chapters, which may be significant sources of the literature, were excluded from the study.

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# Does Perceived Service Quality of Airlines Influence Passenger Satisfaction? An Empirical Investigation

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## Abstract

In the 21<sup>st</sup> century, the primary challenge faced by majority of airlines is meeting heightened expectations of passengers. Effectively addressing this challenge necessitates dedicated focus on enhancing service quality. Providing better quality service is important for survival of any airline operator nowadays. The present research work makes an attempt to find the impact of service quality dimensions on satisfaction of passengers. The study focuses on 257 individuals who have travelled from Silchar Airport. Structured questionnaire with seven-point Likert type scale has been employed for obtaining responses of passengers. Statistical tools, such as, descriptive statistics, one way ANOVA, correlation coefficient and multiple regression have been used for the present study. The study reveals that all the five dimensions used have a positive correlation with passenger satisfaction. Further, all the selected dimensions have a positive and significant influence on passenger satisfaction.

**Keywords:** competence, empathy, reliability, responsiveness and tangibility.

**JEL Code:** M31, L93, O14

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## Introduction

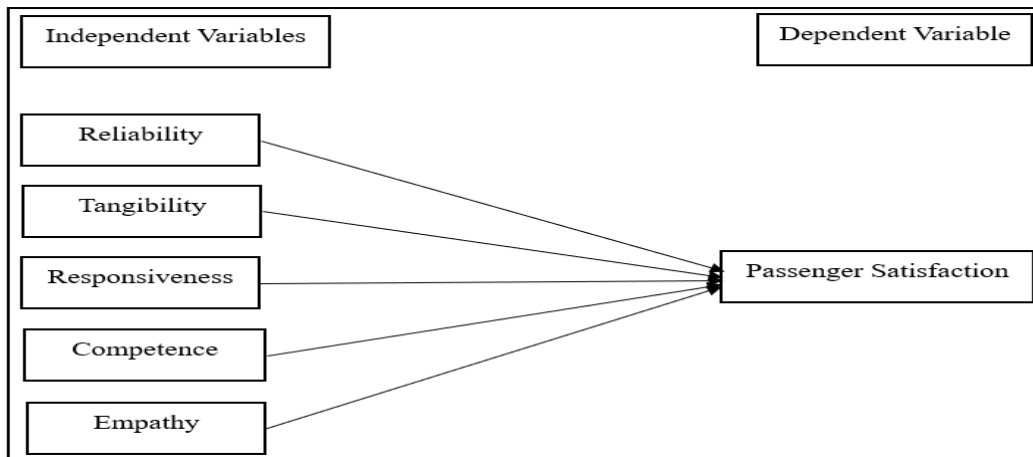
Service industry plays a crucial role in the overall economy throughout the world. Understanding the clients and providing high quality of service is the strategy that can be used by the service providers to place themselves effectively in the highly competitive market (Parasuraman, et. al., 1988; Bitner, et al., 1990; Brown & Swartz 1989; Cronin and Taylor 1992). In today's highly competitive market, service quality is essential not only for retaining existing passengers but also for attracting the potential one. Organization that provides high quality service will have better chance of surviving in the long run (Adhikari and Paul, 2016). The Indian aviation sector is one of the fast-growing industries. It has undergone huge transformation following the liberalisation of Indian economy. The aviation sector is facing an intensified competition due to entry of new private players (Subha and Archana, 2013). With the growth in aviation sector and advancement in technology, the airline sector is more competitive than it has ever been. Travelers today enjoy benefits from competitive environment as they have wide range of choices (Park, et al., 2020). The success of airline services primarily centers on a range of factors, including the availability of diverse facilities, amenities, pricing structures, efficient ground services, in-flight services, seamless travel experiences, and other related aspects (Murugeswari, 2018). With growing importance of the service sector, specifically in airline industry, it is important for the airline companies to gain a deep understanding of their customers and deliver the desired service to their customers. (Pappachan, 2015).

## Review of Literature

Service quality can be perceived as a combination of multiple characteristics. It not only consists of tangible features which can be observed and measured, but also intangible/subjective features which are challenging to quantify precisely. Different people usually have different perspectives regarding quality service, depending on their experiences (Tsaur, et al., 2002). Parasuraman et al. (1988) defined service quality as capability of an organizations to meet or surpass expectations of the customers. It is the difference between customers anticipated service and the perceived service (Zeithaml, et al., 1988). Service quality may be considered as a strategic approach of managing business as it enhances the customer satisfaction which not only helps in instil confidence among customer but also helps in financial performance (Adhikari and Paul, 2016). The phrase 'customer satisfaction' does not simply proclaim a happy consumer, but it is much bigger and multidimensional (Adhikari and Nath 2014). Customer satisfaction is a post purchase evaluation, where perceived performance of the product matches or surpasses the expectations or desires. If the perception doesn't match or exceeds the expectation, dissatisfaction occurs (Kotler and Keller, 2016, p 679). In the airlines industry, ensuring passenger satisfaction is crucial. Due to increasing competition, passengers' satisfaction can impact passengers' decision and also their recommendations for prospect customers. Passenger satisfaction can be explained as the assessment of services received in comparison with the

cost associated with it. Customer satisfaction increases loyalty of the customers, repurchase intention, and prevent the customers being affected by the intense competition (Adhikari & Nath, 2014). Majority of the studies in the sector focuses on customer satisfaction as the key determinant of success (Park, 2019; Shah, et al.,2020; Giao and Vuong 2021; Herlina and Dewi, 2022).

**Fig 1: Conceptual Framework Depicting Association Between Service Quality Dimensions and Passenger Satisfaction**



Source: Developed by Authors

In light of the phenomenal increase in the population, the need for service quality of airlines and passenger satisfaction also gaining importance nowadays. The emphasis on the customer centric strategies explains the evolving nature of the sector, where success is intricately linked with the quality of service and passenger satisfaction. Numerous research works have been done on service quality and satisfaction of passengers and its importance. This section delves into various relevant studies and their major findings related to service quality of airlines and passenger satisfaction.

Shah and et al. (2020) revealed that service quality affects the satisfaction of passengers and loyalty of passengers. Shen and Yahya (2020) revealed that passenger satisfaction is strongly influenced by the price and quality of service, which then leads to passengers' loyalty. A study conducted by Giao and Vuong (2021) found that customer loyalty was positively impacted by service quality. Furthermore, this study highlights empirical evidence of the mediating effects of perceived value, airline image, customer satisfaction, and trust. The study recommended that, in order to attract new and retain existing customers, airlines managers should be aware of customers' expectations as well as passengers' loyalty towards low-cost carriers. The research carried out by Setyanta (2021) revealed that passenger satisfaction is influenced by three factors, i.e., price, quality of service and trust. Herlina and Dewi, (2022). found that service quality and price both exert positive and significant relationship with satisfaction of passengers. Furthermore, customer satisfaction is revealed to have positive impact on passenger loyalty. Chikwendu and Ezenwa (2012) concluded that passengers expressed satisfaction with the empathy, responsiveness, and technical dimensions of service quality. However, they identified the reliability and tangible dimensions of service quality as areas requiring improvement. Murugesan and Perumalsamy (2016) opined that customers are satisfied with the quality of in-flight amenities, cabin spotlessness and seat luxury. Murugeswari and Kanagaraj (2017) found that the service quality dimensions influence the overall opinion about customer satisfaction and also, provide total satisfaction to customers. Malyadri and Satyanarayana (2014) found that companies have not met customers' expectations in delivering what they had promised concerning "service quality". Singh (2014) found that select dimensions have a direct and positive influence on satisfaction of passengers, airline image and passengers' intention. The passengers are found to be pleased with the quality of services provided in-flight.

The literature review clearly depicts that service quality of airline is one of the most sought research areas for researcher highlighting the importance of studying service quality of airlines. The need for research arises as there were no significant studies carried out on service quality of airlines in Northeast India especially in Assam or Barak Valley of Assam. Table 1 reveals the dimensions used in the present study.

**Table 1: Service Quality Dimensions**

<b>Dimensions</b>	<b>Author and Year</b>
Reliability	Chen and Liu (2017); Gilbert and Wong (2003); Abdullah and et al. (2007)
Tangibility	Malhotra et al. (2005); Thapa and et al. (2020); Chikwendu and Ezenwa (2012)
Responsiveness	Gilbert, and Wong, (2003); Malhotra et al. (2005)
Competence	Selnes (1998); Singh, Kumar and Kumar (2019); Singh and Mujoo (2022)
Empathy	Lerrthairakul and Panjakajornsak (2014); Martey and Frempong (2014); Dolekoglu and et al. (2016)

Note: Extracted from the Literature

### **Need of the Study**

Numerous research endeavours have highlighted the importance of service quality in service industry, especially in the era of fierce competition. Identifying and delivering the quality service has become the key differentiator for the service provider seeking to excel and thrive in the highly competitive market (Zeithaml et. al., 1988; Zeithaml, 1988; Lovelock, 1983; Surprenant and Solomon, 1987; Adhikari an Paul, 2016). Service quality is a multifaceted concept which can be studied from different perspective. Previous researchers have applied the concept of service quality in different service industries, but there is a notable gap in research concerning to service quality of airlines, especially focusing on domestic airlines operating from Silchar Airport. Due to the entry of private players in the airline industry, there exist a fierce competition in airline industry. The number of passengers has notably increased in recent years. So, it is crucial to understand the perception of passengers about the service quality of airlines and the service provided by the airlines in this context.

### **Objectives of the Research Work**

The broad objective of the present research work is to gain insight about service quality of airlines and passenger satisfaction in the context of airlines operating from Silchar Airport of Assam. The specific objectives are as follows:

1. To assess the perception of passengers with regard to service quality of airlines under consideration.
2. To analyse the association between service quality of airlines and passenger satisfaction.
3. To analyse the influence of airlines' service quality on passenger satisfaction.

### **Hypotheses of the Research Work**

1. Service quality of airlines and passenger satisfaction are not related to each other.
2. Service quality of airlines does not have any influence on passenger Satisfaction.

### **Data Source and Methodology**

The study deploys descriptive research design to comprehensively understand perception about passengers who have travelled from Silchar Airport. Perception of passengers about service quality and satisfaction were collected from 257 respondents. A structured questionnaire with seven-point Likert type scale ranging from "Strongly Disagree" to "Strongly Agree" have been used for collection of primary data.

**Table 2: Profile of the Respondents**

Variables	Distribution	Frequency	Percentage
Gender	Female	103	40.1
	Male	154	59.9
Age Group	18 to 30	88	34.2
	31 to 40	67	26.1
	41 to 50	32	12.5
	51 and above	70	27.2
Occupation	Govt Employee	54	21.0
	Private Employee	53	20.6
	Businessman	58	22.6
	Professional	35	13.6
	Pensioner	38	14.8
	Others	19	7.3
Monthly Income	Bellow 30,000	39	15.2
	30001 to 60,000	96	37.4
	60,001 to 90,000	61	23.7
	90,001 to 120,000	19	7.4
	120,001 to 150,000	42	16.3
Airline Company	Air India	70	27.2
	Indigo	106	41.2
	SpiceJet	81	31.5

Source: Field Survey

Statistical tools, namely, mean, sd, one way ANOVA, correlation and regression have been used for analysis of the data.

The dimensions of service quality have been used as independent variable in the study and passenger satisfaction has been used as dependent variable

The regression model developed for the study is shown as follows

$$PS = \beta_0 + \beta_1REL + \beta_2TANG + \beta_3RES + \beta_5COM + \beta_6EMP + \varepsilon_i$$

Where, PS= Passenger Satisfaction

REL= Reliability

TANG= Tangibility

RES= Responsiveness

COM= Competence

EMP= Empathy

$\varepsilon_i$  is the error term

### Scope of the Research Work

1. The present study considers the passengers who have travelled from Silchar Airport only.
2. The service quality is measured through five dimensions.

### Limitations of the Research Work

1. The present research is inherently constrained by the limitations typically associated with the perception-based study.
2. It is not possible to completely ignore the sampling errors in the study.



## Results and Discussion

Table 3 shows the mean and standard deviation of various dimensions of service quality and passenger satisfaction. Passenger satisfaction has a mean score of 5.2418 with standard deviation of 1.03566.

**Table 3: Perception of Passengers on Select Dimensions of Service Quality**

Dimensions	Mean	Standard Deviation
Reliability	5.1626	1.08506
Tangibility	5.0202	0.95487
Responsiveness	5.2500	1.11344
Competence	5.3045	1.11254
Empathy	5.0204	1.26101
Passenger Satisfaction	5.2418	1.03566

Source: Field Survey

Among the service quality dimensions, competence has highest mean score of 5.3045 followed by responsiveness with mean score 5.2500 and reliability with mean score of 5.1626, implying that these are the most important dimension that contributes to the service quality of airlines and passenger satisfaction. Conversely, the dimensions like tangibility and empathy have received lowest mean score of 5.0202 and 5.0204 respectively. However, Tangibility has lowest standard deviation of 0.95487 implying more consistency in the responses of the passengers.

**Table 4: Airline Wise Perception of Passengers**

Dimensions	Airline	Mean	Std. Deviation	F Value	p Value
Reliability	Air India	5.4114	1.05604	15.446	.000
	Indigo	5.4000	.96491		
	SpiceJet	4.6370	1.08403		
Tangibility	Air India	5.0686	.78455	4.169	.017
	Indigo	5.1736	.99640		
	SpiceJet	4.7778	.99549		
Responsiveness	Air India	5.6536	1.08121	9.447	.000
	Indigo	5.2594	1.07234		
	SpiceJet	4.8889	1.08397		
Competence	Air India	5.6500	1.10368	14.940	.000
	Indigo	5.4741	.97829		
	SpiceJet	4.7840	1.11226		
Empathy	Air India	5.4429	1.15327	11.708	.000
	Indigo	5.1274	1.25131		
	SpiceJet	4.5154	1.20698		
Satisfaction	Air India	5.72245	.899862	23.693	.000
	Indigo	5.35445	.933812		
	SpiceJet	4.67901	1.024578		

Source: Field Survey

Table 4 depicts the airline wise value of mean and SD for perception of passengers about service quality of airlines. In case of tangibility dimension Indigo has received highest mean score followed by Air India and SpiceJet. Besides this, Air India has received highest mean score in all other dimensions. It is to be noted that, SpiceJet has received lowest mean score which means that SpiceJet has failed to provide good services in relation to other Air India and Indigo. One way ANOVA have been employed to test the hypothesis if the perception of passengers on different dimensions varies across different airlines. Table 4 shows that all the dimensions have p value less than 0.05. which implies that perception of passengers about service quality of airlines varies significantly across different airlines.

**Table 5: Correlation between Dimensions of Service Quality and Passenger Satisfaction**

Dimensions	Correlation Coefficient
Reliability	.756**
Tangibility	.683**
Responsiveness	.808**
Competence	.873**
Empathy	.858**

\*Significant at 5% level

Source: Field Survey

Table 5 explains the association between the dimensions of service quality and satisfaction of passengers. The computed value of correlation coefficient depicts that there exists positive and strong correlation between passenger satisfaction and all the five explanatory variables. The p value clearly depicts that the correlation between passenger satisfaction and select dimensions of service quality is statistically significant at 5% level of significance.

**Table 6: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946 <sup>a</sup>	.894	.892	.339810
a. Predictors: (Constant), Empathy, Tangibility, Reliability, Responsiveness, Competence				
b. Dependent Variable: Passenger Satisfaction				

Source: Field Survey

The R<sup>2</sup> value in table 6 indicates that approximately 89.4% of the variation in the degree of passenger satisfaction is accounted for by the explanatory variables used in the study. The value of adjusted R<sup>2</sup> also indicates that 89.2% of the variability in the degree of passenger satisfaction is explained by chosen predictors. Thus, the dimensions of service quality selected for the study could explain a substantial amount of variation in passenger satisfaction.

**Table 7: ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	245.603	5	49.121	425.393	.000 <sup>b</sup>
	Residual	28.983	251	.115		
	Total	274.586	256			
a. Dependent Variable: Passenger Satisfaction						
b. Predictors: (Constant), Empathy, Tangibility, Reliability, Responsiveness, Competence						

Source: Field Survey

The high significance of the regression model is indicated by the F-statistic of 425.393, along with a p-value of 0.000. The findings suggest that the data effectively demonstrate the influence of the selected service quality dimensions on the satisfaction of passengers. Hence, the overall predictability of the model is favourable, indicating its ability to provide valuable insights and explanations regarding passenger satisfaction.

**Table 8: Multiple Regression Analysis**

Model		Unstandardized_Coefficients		Standardized_Coefficients	t value	p value
		B	Std. Error	Beta		
1	(Constant)	.204	.123		1.661	.098
	Reliability	.091	.031	.095	2.917	.004
	Tangibility	.080	.034	.074	2.356	.019
	Responsiveness	.208	.033	.224	6.253	.000
	Competence	.291	.035	.312	8.248	.000
	Empathy	.305	.028	.372	11.096	.000

Source: Field Survey

Table 8 shows that all the five explanatory variables have positive influence on passenger satisfaction as all the predictors have positive b value. Among the independent variables empathy has the highest standardized coefficient (Beta), which implies that impact of empathy dimension is highest on passenger satisfaction if the effect of other dimensions remains unchanged. Likewise, the impact of tangibility dimension is lowest on passenger satisfaction as it has the lowest beta value. The computed value of t and its corresponding p value clearly depicts that there exists a statistically significant impact of all the five select service quality dimensions and passenger satisfaction.

**Table 9: Collinearity Statistics**

Dimensions	Tolerance	VIF
Reliability	.397	2.516
Tangibility	.429	2.333
Responsiveness	.328	3.047
Competence	.293	3.410
Empathy	.374	2.670

Source: Field Survey

Table 9 shows the result of multicollinearity statistics to judge the individual impact of explanatory variables on explained variable. Variation Inflation Factor (VIF) is commonly used measure for detecting multicollinearity, with a conventional threshold suggesting that of VIF exceeding 10 may indicate collinearity issue (Mason et.al., 1989). Table 9 also shows Variation Inflation Factor (VIF), which ranges between 2.333 to 3.410 and thus there is no problem of multicollinearity. Tolerance value exceeding 0.10 is considered as a yardstick for assessing the impact of explanatory variables in the model and signifies that explanatory variables are independent from each other (Kennedy, 1992). The computed tolerance value suggests that regression model is free from multicollinearity of the explanatory variables since all the tolerance values are well above this threshold, ensuring the absence of multicollinearity in the model.

## Conclusion

The service industry operates in a highly competitive and consumer-driven environment, where, service quality play dominant role in shaping success and sustainability of airlines. Service quality is not an optional aspect of airline industry, but it is a critical determinant for success. The study reveals that all the dimensions of service quality have a positive and significant correlation with passenger satisfaction. Notably, the result aligns with the findings of research works done by Hasan, et al., (2019); Khuong and Uyen (2014); Jahmani (2017). The study reveals that dimensions of airline service quality selected for the study demonstrate statistically significant impact on passenger satisfaction. This aligns with the research work carried out by Murugeswari, and Kanagaraj, (2017); Shanka, (2012); Huang, et al. (2009). The consistency in results across these studies strengthens the understanding that these dimensions play significant role in impacting passenger satisfaction. Further, the measurement of service quality should be on a continuous basis to ensure the best quality. Airlines officials should take these evaluations seriously to enhance service quality, thereby increasing passenger satisfaction and confidence. The management needs to take every dimension of service quality seriously. Corrective measures can be taken in the dimensions that exhibit weaknesses in meeting customer expectations. To enhance the experience of the passengers, the airline company should provide additional training to front-line

staffs, enhancing their skills and knowledge to ensure fast and reliable service. Additionally, upgrading the physical aspects is also necessary to enhance the experience of the passengers.

### Scope for Future Research Work

1. Similar type of study with a larger sample size may be conducted in other locations.
2. New components of service quality may be used to study the association between service quality and satisfaction of the passengers.
3. Service quality of different airlines may be compared which will provide valuable insights for policy-makers and management of airlines.

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# Identification of Factors Influencing Retail Investors Perception for Investment in Mutual Funds

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## Abstract:

The Asset Management Industry has played a key role in the channelization of savings and providing investment opportunities. Mutual Fund industry in India has been growing at a rapid pace during the past few years. Hence the study on the investors' behaviour and their behavioural intension towards investment in mutual funds can enable Asset Management Companies (AMCs) to estimate market expansion, increase the customer base and provide the opportunity of financial savings and investment to a large section for inclusive development. Thinking in this line this study aimed to discuss on identification of significant determining factors of the retail investors to invest in Mutual funds. The study was conducted on the retail investors of Kolkata. The present study focuses on distinctive major factors moving the financial investors in adoption of mutual funds.

**Key Words: Mutual Funds, Retail Investors Preference, Savings and Investment Profile, Factor Analysis**  
**JEL Classification: G4, G5**

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## Introduction

Investment opportunities is an area where the challenge everyone faces is a plethora of options which includes stocks, bonds, money market securities, debenture, mutual funds, bank deposits and many others. However, every option comes with its own set of benefits and an investor tries to choose that combination of investment options, through which the risk factor can be minimised and return can be optimized.

Mutual funds are also one of the many investment instruments in which retail investors prefer to invest their savings. Mutual Funds are today a very important savings vehicle for investors in the developed countries and they provide an excellent opportunity to obtain a more diversified portfolio through investment in diversified asset classes.

According to Aarti G. et al (2020) the global mutual fund assets market size which was valued at \$54.93 trillion in 2019 is projected to reach \$101.2 trillion by 2027, growing at a CAGR of 11.3%.

The Average Assets Under Management (AAUM) of Indian Mutual Fund Industry for the month of April 2023 stood at Rs 41,52,715 crore. The Asset Under Management (AUM) of the Indian MF Industry has grown from Rs 8.26 trillion as on April 30, 2013 to Rs 41.62 trillion as on April 30, 2023 which is more than 5-fold increase in a span of 10 years. The Indian MF Industry's AUM has grown from Rs 23.26 trillion as on April 30, 2013 to Rs 41.62 trillion as on April 30, 2023, nearly a 2-fold increase in a span of 5 years.

**Table 1: Net Asset under Management in the month of March for previous 4 years**

YEAR	March 2020	March 2021	March 2022	March 2023
Average Net Assets under Management (in Crores Rs) (Excluding Funds of Fund)	2226202	3217195	3770295	4004637
	12257	26486	47089	61842

(Source: <https://www.amfiindia.com/research-information/amfi-monthly>)

**Table 2: Number of Folios as on 31<sup>st</sup> March for previous 4 years**

YEAR	March 2020	March 2021	March 2022	March 2023
Number of Folios for all types of MF (Excluding Funds of Fund)	89746051	97865529	129504652	145730600
Number of Folios for Funds of Fund	637072	1163437	1728324	1862743

(Source: <https://www.amfiindia.com/research-information/amfi-monthly>)

The Indian Mutual Fund industry has come a long way since its inception in 1963 with UTI (Unit Trust of India). In the last few years, the Indian Mutual Fund industry has experienced significant growth with the entry of private sector in 1993, with Kothari Pioneer being the first private player. This gave Indian investors a wider choice of MF products. The number of Mutual Funds increased over the years, with many foreign sponsors setting up Mutual Funds in India. At present there are 44 Asset Management Companies in India offering a varied type of schemes – Debt, Equity, Liquid and Money Market, Exchange Traded Funds and Funds of Funds.

Despite of phenomenal record growth India's mutual fund AUM to the country's GDP ratio is only 16% compared to a global average of 74%. The Equity AUM to market capitalisation is 6 % compared to world average of 33 %.

A study on the investors' behaviour and their behavioural intension towards investment in mutual funds can enable Asset Management Companies (AMCs) to estimate market expansion, increase the customer base and provide the opportunity of financial savings and investment to a large section for inclusive development. Thinking in this line this study aimed to discuss on identification of significant determining factors of the retail investors in Kolkata to invest in Mutual funds.

### Review of Literature

**Schmidt, (2010)** identified that social pressure, attitude and perceived behavioural have positive influence on the intention to invest in mutual funds among the investors in Germany. This study, based on understanding the factors influencing the decision to participate in capital markets through mutual funds, has significant contribution on household finance and portfolio choice.

**Dey and Saha, (2011)** studied the investor perception of mutual fund investment among 100 respondents in Kolkata. The survey found that mutual funds ranked third in preference of savings instruments and investors preferred balanced schemes followed by income schemes. 60 percent of the respondents preferred open ended scheme, 34 percent preferred close ended scheme and 6 percent preferred interval scheme. Nine variables were employed to analyze factors influencing investors behaviour in selecting a fund. Three factors - F 1: Intrinsic Fund Qualities, F 2: Flexible Investment Facilities and F 3: Credibility of Image were identified.

**Karthikeyan, Bharath and Kumar, (2012)** studied the response of 108 customers in Tiruchirapalli towards sale of mutual fund products by banks. The study identified the following eight factors that influence mutual fund investors to buy mutual fund products through banks – “competitive product”, “safety”, “emergency need fulfilment”, “financial requirements”, “service quality”, “changing of fund preferences” and “assured returns”.

**Kumar and Arora, (2012)** studied investment behaviour of mutual fund investment among 200 mutual fund investors in Punjab. The important factors affecting mutual fund investment were: return, liquidity, tax savings, risk, diversification, exit load, lock in period, past performance, sector where investment will be made, rating, promoter name, size of corpus. There were significant differences with respect to demographic profile and nature wise, sector wise and scheme wise investment in mutual funds.

**Nihar and Narayan, (2012)** studied the investor preference for mutual funds among 436 respondents in Visakhapatnam employing factor analysis. Twenty variables were used to study the preference of investors. Factor analysis yielded the following eight factors. F1: Security preferences, F 2: Monetary considerations, F 3: Product features, F 4: Strength of AMC, F 5: Portfolio of Fund, F 6: Rating of fund, F 7: Regulatory body, F 8: Investors perception.

**Sharma, Kaur, and Jain (2012)** studied the factors which influence the satisfaction of investors towards Mutual Funds industry by employing Servqual Model among 100 respondents in Bhilai and Raipur. Seventeen variables were employed and Factor analysis generated five factors.



**Sharma, (2012)** conducted the study on Indian Investor's Perception towards Mutual Funds on 250 respondents. He conducted the study on fourteen variables and employed factor analysis for the study. The study identified three factors – which were – Scheme and Fund related attributes, Monetary benefits and Sponsor attributes.

**Agrawal and Jain, (2013)** analyzed the investor preferences and behaviour of 288 respondents in Mathura and found that mutual funds are most important type of investments for investing funds for return and tax planning.

**Paul, (2013)** studied customer and perceived experience of 275 Mutual Fund investors in Guwahati on the basis of fifteen variables relating to customer expectation and customer experience. The study found that there exists a significant gap between the expectation and perceived experience of the retail investors of the mutual fund from the customer communication dimension of marketing mix in the regions of Guwahati.

**Chawla, (2014)** studied mutual fund buying behaviour on 431 respondents on eleven attributes and found two factors - credibility of the fund and miscellaneous features of the fund. Of all the attributes considered in the study the following was considered important- past performance, reputation of the company issuing the fund, portfolio of the investment, tax benefits and transparency of fund manager. The study found that the investors considered the performance record of the issuing company as most important, which was followed by recommendation of friends and family members. It was observed that the most preferred fund was growth fund followed by tax saving funds. Investors considered tax savings, higher returns and capital appreciation.

**Geethaa and Vimala, (2014)** studied the perception of 500 investors for select financial investment avenues – Bank fixed deposits, shares and mutual funds. The study found that there were no significant differences on basis of demographic profiles - gender and risk taking capacity of the respondents and that there were significant differences in relation to age, family size, occupation and income and risk taking capacity. In the case of mutual funds twelve variables were used to analyze the perception of mutual funds and all were significant.

**Sehdev and Ranjan, (2014)** studied investors' perception towards mutual fund investment among 160 respondents in New Delhi. The study found that the following four factors (fourteen variables) were responsible for investor preference for mutual funds. The factors were - benefits and transparency, returns on investment, redemption period and liquidity and activities of Institutional investors. Most of the respondents felt that they were getting the information from the internet over other sources. Majority of the investors were moderate risk takers and invested in balanced funds to earn higher returns for a low level of risk.

**Rastogi, (2015)** Identified the Factors for Investments in Mutual Funds through Banks. He studied the responses of 250 bank based customers on thirteen variables. Three factors - F 1 : Satisfaction of Mutual Fund Investments, F 2: Knowledge About Mutual Funds and F 3: Awareness about Mutual Fund Schemes were identified

**Siby and Joseph, (2015)** studied the perception of retail investors towards mutual funds among 472 respondents in Kerala by applying twenty two variables. Factor analysis generated four factors - Knowledge & Awareness, Regulation & Transparency, Convenience & Flexibility and Return & Affordability. Convenience and flexibility was the most important factor, followed by regulation and transparency, knowledge and awareness and return and affordability. The study found that there were no significant differences for the demographic variables influencing investor perception.

**Joshi, (2016)** aimed to identify the factors which discriminates between the small investors, in Nagpur city, towards their investment in MF and non-investors using Logistic Regression Model. The returns on investment and lock in period along with information received from the internet and friends & relatives have significant impact, according to this study, on the investors to invest in MFs. On the other hand, high risk associated with the market followed by inefficient investment advisors hindering the investors to invest in MF. The small investors are always concerned with high risk associated with their investment portfolio. Hence this study emphasised on right information about the product portfolio, awareness program, efficiency of the investment advisors with current updates to win the confidence of the small investors to investment in MFs

**Amiri and Lafuente, (2016)** studied the factors affecting the mutual fund by individual investors in Iran. Investors were classified into five categories - professional, ambitious, moderate, conservative and cautious. Comparison of fund selection behavior of professional investors with cautious investors revealed that cautious investors have more emphasis on 4 factors (Portfolio Management, Flexible investment facilities, Preliminary Disclosure, Fringe Benefits) in MF selection behaviour. Mutual funds were grouped into three major factors – “fund related qualities (having eleven variables)”, “fund sponsor qualities (having five variables)” and “Investor related services (eight variables)”. Factor analysis resulted into three factors for fund related qualities –Intrinsic product, portfolio management and flexible investment facilities. For fund sponsor qualities there were two factors – research group and reputation. For investor related qualities there were two factors – preliminary disclosure and fringe benefits.

**Begum and Rahman, (2016)** studied the preference of investors towards Mutual Fund investment in Dhaka among 120 investors. There was no significant difference for the demographic variables and preference for mutual funds. Fourteen variables were employed for the study and Factor analysis resulted in three factors.

**Kaur, (2016)** studied the Investors' perception of 223 respondents towards mutual funds in Punjab on the basis of sixteen variables. Factor analysis generated the following five factors. Factor 1: better investment avenues, Factor 2: Investors Experience, Factor 3: Expected Benefits, Factor 4: Performance of a Company and Factor 5: Expert Guidance. The study found that there were no significant differences for the demographic variables influencing investor perception except income.

**Kaur and Kaushik, (2016)** examined the investors behaviour in mutual fund and to identify the significant determinant which may help to push the investment in mutual funds in the country. Based on 450 responses collected from Delhi-NCR the study applied the theory of planned behaviour to examine the effect of awareness, attitude and socioeconomic characteristics of an investor using a logit model. It was observed that instead of risk perception, belief awareness related to various aspects of mutual funds had positive significant impact on the investor's behaviour. Further, socio-economic characteristics such as age, gender, occupation, income and education of investors had an impact on the awareness about mutual funds. Focus is also demanded to generate awareness among females, middle income groups to improve the awareness in the mutual funds

**Sharma, (2016)** studied the investor preference analysis for Mutual Fund among 500 respondents in Indore. The study employed factor analysis and identified twelve factors. The survey found that there were no significant differences in age of respondents, occupation and most preferred factor. The study also found that there were no significant differences according to demographic factors - income and the percentage of investment in mutual funds of total investment.

**Chandrakala and Suresh, (2017)** studied risk perception towards Mutual Funds among 250 women investors in Bengaluru. The study employed eleven variables to understand the perception and factor analysis was done to identify the factors which influence investors perception towards mutual funds, three factors were identified – MF features, flexible investment opportunities, perception of women investors . The study also found that there was a significant relationship between age and risk perception of women investors, employment and purpose of investment.

**Mark and WH Ip, (2017)** conducted an exploratory study with an objective to fulfil the research gap of estimating the financial investment behaviour of Mainland Chinese and Hong Kong investors. They used linear regression model and concluded with the fact that the significant predictors of investors behaviour are their psychological, sociological and demographic factors

**Sagi and Nair, (2017)** studied Mutual Fund investor expectations between 400 Mutual Fund Investors and 400 Non Mutual Fund Investors in Kerala. The study found that the following five factors impact investors' decision in mutual funds: "Fund promotion", "Role of Intermediaries", "Service", "Fund performance" and "Fund Quality". There was difference in perception of the two investor groups regarding – "expert advice", "technology – enabled services", "professional fund management", "redressal of investor grievance".

**Singal and Manrai, (2018)** studied the factors affecting investment in Mutual Funds among 226 respondents in New Delhi. Thirteen variables were studied which have a bearing on investment in Mutual Funds. The factors – "previous performance", "experience of the fund manager", "return", "risk", "diversification", played a very vital role in the investment decision-making process of an investor. Investor duly considers the date of inception of the fund and takes note of the time span and investor confidence to, ensure security of its investment in mutual funds.

**Alhorani, (2019)** identified the factors which investors consider to decide in investment in mutual funds among 200 respondents in North India. The study employed twenty variables for the study and identified Nine Factors by employing Factor Analysis. The important factors were – professional management, easy access, less brokerage and less fluctuation, attractive plan for future, risk, economies of scale, expertise, regulation and tax benefits.

**Annamalah, Raman, Marthandan, and Logeswaran, (2019)** studied the determinants of an investor decision in unit trust investment among 202 respondents in Malaysia. Four factors - financial status, risk taking behaviour, investment revenue and information with five variables each were analyzed to find the effect on investment behaviour. The study found that return had no statistical relationship to the investment behaviours. Financial status, risk-taking behaviour, and sources of information were found to have a significant relationship of influence on the investors' decision in unit trust investments.

**Hameed, Imran, Maqbool, Ahmed, and Azeem, (2019)** studied the prospective factors that lead to investment in mutual funds among 244 respondents in Pakistan. The study identified seven factors – "risk and return",

“liquidity of assets”, “demographic factors”, “convenience”, “reduced transaction cost”, “tax benefit”, “transparency”. Investor perception was considered as a mediating variable of these seven factors to the dependent variable investment in mutual funds. Demographic factors had significant effects on investment decisions in mutual funds. The male individuals were more likely to invest in mutual funds as compared with female individuals. Increase in age increased the intention to invest in mutual funds.

**Hrushikesh and Kaboor, (2019)** identified the factors influencing investments in mutual funds among 613 investors in Mysore. The study employed eighteen variables and identified four factors - F 1: Mutual Fund company, F 2: Investor Grievance, F 3: Mutual Fund regulations and F 4: Mutual Fund product services.

**Rout and Mohanty, (2019)** studied the factors motivating the investors to make investment in mutual funds among 100 investors in Odisha. The study was conducted on the basis of seventeen variables. Factor analysis generated four factors - F 1: Intrinsic Qualities, F 2: Portfolio management, F3: Extra benefits and F 4: Image.

**Sharma, (2019)** studied the factors influencing investors’ perception towards investment in Mutual Funds, among 100 investors in Delhi / NCR. The study employed nineteen variables and identified five factors namely – Characteristics, Credibility, Convenience, Success Factors and Fund of Family.

**Patel and Trivedi, (2020)** studied the factors affecting investment decisions of 200 investors in mutual funds in Anand district of Gujarat. The study found that 58 percent of the respondents preferred Equity and 42 percent preferred mutual funds. For those respondents who are investing in mutual funds 41 percent invested in monthly income schemes, 30 percent in equity schemes, 20 percent in balanced schemes and balance in debt schemes. Fourteen variables were used to identify the factors. The most important factors in investor decision-making was the “corpus or AUM of fund”, “current financial market conditions” and “reputation of fund managers”. Other key factors are “portfolio scheme”, “past fund results”, “liquidity”, “settlement” and “risk appetite” of investors and ‘fund sustainable performance’. At the same time, the concerns of investors and the dividend history were also considered as an important factor in investor decision-making. Factor analysis yielded three factors.

**Raja and Jagadesswaran, (2020)** studied the investor perception of 200 respondents for mutual fund schemes in Chennai. The research employed factor analysis to analyze three-dimension investors’ perceptions variables – mutual fund schemes related factors which identified Nine factors, mutual fund company related factor which had Seven factors and investor service related factors which had Eight factors.

### **Objectives of the Study**

Several studies were conducted to understand the attitude and perception of the investors in mutual funds both pre and post covid period also. After the covid pandemic behavioural changes are observed among the investors and also in their investment- savings portfolio. With an aim of sustainable development and financial literacy no study was conducted in Kolkata to understand the factors responsible for investment in mutual funds even in the post covid period. To fill up this gap it is necessary to study the perception of retail investors specifically towards mutual funds only in Kolkata. Before that it is also essential to identify the factors responsible for investment in mutual fund investment among the investors in Kolkata. Thinking in this line this study mainly focused on the various factors those play significant role in determining the behaviour of the investors towards mutual fund in Kolkata. Such an initiative can pave the way to study the perception of the investors which determines the buying intension of the investors. the study on the investors’ behaviour and their behavioural intension towards investment in mutual funds can enable Asset Management Companies (AMCs) to estimate market expansion, increase the customer base and provide the opportunity of financial savings and investment to a large section for inclusive development

### **Data and Methodology**

Retail investors in Greater Kolkata have been selected for the study who have exposure as well as investments in the mutual fund market. Given the nature of the study a non probability (convenience) sampling method was selected. For collecting the data a pilot study was conducted among retail mutual fund investors in Kolkata. This area has been chosen for data collection has been restricted to Greater Kolkata as we want to understand the perception of mutual fund investors in cities. In order to collect the sampling units, both hardcopies and Google form of the questionnaire were used. In case of hardcopies, prior appointment were taken from people; we are already affiliated with, to meet them at their convenience to fill up the questionnaire as done in convenient sampling process. For the online forms, the participants filed up the Google forms previously sent to them with their approval.

As the entire findings of the study is based on primary data and the data is collected with the help of a structured questionnaire from a group of 314 investors. The entire data collection process took 30 days.

## Descriptive

### Gender

**Table 3: Gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Male</b>	237	75.5	75.5	75.5
<b>Female</b>	77	24.5	24.5	100
<b>Total</b>	314	100	100	

From the table 3, it is seen that majority of the respondents are male compared to female. Out of the 314 respondents, 237 (75.5%) respondents are male and 77 (24.5%) respondents are female

### Age

**Table 4: Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>21-30</b>	134	42.7	42.7	42.7
<b>31-40</b>	84	26.8	26.8	69.4
<b>41 to 50</b>	50	15.9	15.9	85.4
<b>51 and above</b>	46	14.6	14.6	100
<b>Total</b>	314	100	100	

From the table 4 out of 314 respondents, 134 (42.7%) respondents are in age group 21-30years, 84 (26.8%) respondents are in age group 31-40 years, 50 (15.9%) respondents are in age group 41-50 years and 46 (14.6%) respondents are in the age group of 51 and above.

### Marital Status

**Table 5: Marital Status**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Unmarried</b>	150	47.8	47.8	47.8
<b>Married</b>	152	48.4	48.4	96.2
<b>Separated/Widow</b>	12	3.8	3.8	100
<b>Total</b>	314	100	100	

From the table 5, it is observed that out of 314 respondents, 150 (47.8%) respondents are unmarried, 152 (48.4%) respondents are married and 12 (3.8%) respondents are separated / widow.

### Education

**Table 6: Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Secondary</b>	2	0.6	0.6	0.6
<b>Higher Secondary</b>	21	6.7	6.7	7.3
<b>Graduate</b>	113	36	36	43.3
<b>Post Graduate</b>	127	40.4	40.4	83.8
<b>Professional</b>	51	16.2	16.2	100
<b>Total</b>	314	100	100	

From the table 6, it is observed that out of 314 respondents, 2 (.6%) respondents have Secondary level education, 21 (6.7%) respondents have Higher secondary level education, 113 (36%) respondents are graduate, 127 (40.4%) respondents are Post graduate and 51 (16.2%) respondents have professional level education

### Occupation

**Table 7: Occupation**

	Frequency	Percent	Valid Percent	Cumulative Percent
<b>Student</b>	32	10.2	10.2	10.2
<b>Private Sector</b>	157	50	50	60.2
<b>Government Sector</b>	44	14	14	74.2
<b>Business</b>	27	8.6	8.6	82.8
<b>Professional / Self Employed</b>	54	17.2	17.2	100
<b>Total</b>	314	100	100	

From the table 7, it can be observed that out of 314 respondents, 32 (10.2%) respondents are student, 157 (50%) respondents are private sector employee, 44 (14%) respondents are government sector employee, 27 (8.6%) respondents are business person and 54 (17.2%) respondents are professional / self employed.

### Monthly Income

**Table 8: Monthly Income (Rs)**

	Frequency	Percent	Valid Percent	Cumulative Percent
25000-35000	120	38.2	38.2	38.2
35001-50000	71	22.6	22.6	60.8
50001-80000	57	18.2	18.2	79
80001-100000	29	9.2	9.2	88.2
100001-150000	19	6.1	6.1	94.3
150001-200000	6	1.9	1.9	96.2
200001 and above	12	3.8	3.8	100
<b>Total</b>	<b>314</b>	<b>100</b>	<b>100</b>	

From the table 8, it can be observed that, out of 314 respondents, 120 (38.2%) respondents have monthly income between Rs 25000 to Rs 35000, 71 (22.6%) respondents have monthly income between Rs 35001 to Rs 50000, 57 (18.2%) respondents have monthly income between Rs 50001 to Rs 80000, 29 (9.2%) respondents have monthly income between Rs 80001 to Rs 100000, 19 (6.1%) respondents have monthly income between Rs 100001 to Rs 150000, 6 (1.9%) respondents have monthly income between Rs 150001 to Rs 200000 and 12 respondents have monthly (3.8%) income of Rs 200001 and above.

### Mode of investment in Mutual Funds

**Table 9: Mode of investment in Mutual Funds**

Medium of investment	Frequency	Percentage
a. Directly - From the Fund House	81	25.8
b. Through the MF Distributors and Brokers	159	50.64
c. Both a & b	74	23.57

From the above table it can be seen that 81 respondents invest in Mutual Funds in direct mode through the Fund house, 159 respondents invest through mutual fund broker and distributors and 74 respondents invest through both modes.

## Investment profile of mutual fund investors

**Table 10: Investment profile of mutual fund investors**

Investment Avenues	No of Respondents	Percentage (%) of respondents	Mean Score	Rank based on Mean Score
Bank Fixed Deposit	245	78.03	21.87	2
Post Office Schemes	208	66.24	7.71	6
Public Provident Fund	209	66.56	11.27	5
Equity Shares	245	78.03	20.6	3
Mutual Funds	314	100	35.43	1
Life Insurance	224	71.34	12.06	4
Gold/Bullion	212	67.52	7.14	7
Bonds and Debentures	186	59.24	3.7	9
Real Estate	196	62.42	5.89	8

From the table it can be observed that out of 314 respondents, 245 (78.03%) respondents invest money through bank fixed deposits scheme, 208 (66.24%) respondents invest money through post office scheme, 209 (66.56%) respondents invest in Public Provident Fund scheme, 245 (78.03%) respondents invest in equity shares, 314 (100%) respondents invest in Mutual Funds, 224 (71.34%) respondents invest in Life insurance policies, 212 (67.52%) respondents invest in Gold, 186 (59.24%) respondents invest in bonds and debentures and 196 (62.42%) invest in real estate.

To find the mean score of each investment avenue, the respondent was requested to allocate 100 points among the investment avenues where he invests his savings and the mean score of the investment avenue were calculated for such respondents. On the basis of the mean score it is observed that mutual funds have the highest mean score of 35.43, followed by bank fixed deposit in second position with a score of 21.87, equity shares has a mean score of 20.60, Life insurance has a mean score of 12.06, Public provident fund has a mean score of 11.27, Post office scheme has a mean score of 7.7, Gold has a mean score of 7.14, real estate has a mean score of 5.89 and bonds and debenture has mean score of 3.70

### Factor Analysis

**Table 11: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.876
Bartlett's Test of Sphericity	Approx. Chi-Square	3361.052
	df	276
	Sig.	0

Both KMO and Bartlett's test satisfies that factor analysis can be applied, Factor analysis yielded 6 Factors

### Reliability Analysis

**Table 12: Cronbach's Alpha**

Variables	Number of Items Loaded	Cronbach's Alpha
Return from Investment	4	0.744
Risk diversification	4	0.79
Mutual Fund scheme features	3	0.844
Asset Management Company Performance	4	0.769
Tax savings alternative	4	0.828
Investors services	5	0.828

**Total variance explained**

**Table 13: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.792	32.468	32.468	7.792	32.468	32.468	3.013	12.556	12.556
2	2.268	9.451	41.919	2.268	9.451	41.919	2.871	11.962	24.518
3	1.761	7.339	49.258	1.761	7.339	49.258	2.548	10.615	35.133
4	1.319	5.494	54.752	1.319	5.494	54.752	2.446	10.19	45.323
5	1.222	5.093	59.845	1.222	5.093	59.845	2.392	9.967	55.29
6	1.159	4.827	64.672	1.159	4.827	64.672	2.252	9.382	64.672
7	0.832	3.467	68.139						
8	0.772	3.215	71.354						
9	0.716	2.985	74.339						
10	0.693	2.889	77.229						
11	0.615	2.562	79.791						
12	0.561	2.336	82.127						
13	0.531	2.212	84.339						
14	0.493	2.053	86.392						
15	0.47	1.958	88.35						
16	0.422	1.757	90.107						
17	0.401	1.672	91.78						
18	0.388	1.616	93.395						
19	0.342	1.424	94.819						
20	0.305	1.27	96.089						
21	0.264	1.1	97.189						
22	0.257	1.071	98.26						
23	0.212	0.882	99.142						
24	0.206	0.858	100						

Extraction Method: Principal Component Analysis.

## Factors

**Table 14: Investor Service**

### Factor 1: Investor Service

Code	Factor Loading	Items	Mean	SD	Opinion
IS1	0.418	I consider information available in print and digital Media regarding the MF schemes published by AMC	4.876	1.54	Somewhat agree
IS2	0.648	I consider seminars conducted by the AMC on Investor's awareness program	4.879	1.691	Somewhat agree
IS3	0.846	I consider the quick responsiveness to investors queries while investing in MF Schemes	5.016	1.631	Somewhat agree
IS4	0.739	Prompt grievance redressal by the Fund house guides me to invest in a MF Scheme.	5.102	1.596	Somewhat agree
IS5	0.738	Well explained scheme characteristics and offer documents attracts me to invest in an MF scheme.	5.567	1.448	Agree

**Table 15: Tax Savings alternative**

### Factor 2: Tax Savings alternative

Code	Factor Loading	Items	Mean	SD	Opinion
TAX1	.811	I invest in Mutual Funds to save tax.	4.940	1.856	Somewhat agree
TAX2	.598	Mutual Fund scheme provide higher returns compared to other tax savings investments	5.484	1.433	Agree
TAX3	.768	I consider the tax implications of investment in Mutual Funds	5.275	1.620	Somewhat agree
TAX4	.840	Tax benefits are an encouraging factor for me to invest in Mutual Funds.	5.144	1.730	Somewhat agree

**Table 16: Risk Diversification**

### Factor 3: Risk Diversification

Code	Factor Loading	Items	Mean	SD	Opinion
Risk1	.572	I consider the risk of the MF scheme before investing	4.940	1.856	Somewhat agree
Risk2	.674	I consider the credit rating and safety of the MF scheme before investing	5.484	1.433	Agree
Risk3	.766	I think that MFs diversifies and reduces risk	5.275	1.615	Somewhat agree
Risk4	.763	I consider MF investment is less risky compared to share market	5.144	1.730	Somewhat agree



**Table 17: Return from Investment****Factor 4: Return from Investment**

Code	Factor Loading	Items	Mean	SD	Opinion
Ret1	.679	I consider Historical Returns before investing in MF Scheme.	5.949	1.026	Agree
Ret2	.802	I am likely to invest in a MF Scheme if its return is higher than its benchmark return e.g. NIFTY return/SENSEX return.	5.908	.970	Agree
Ret3	.617	I am likely to invest in a MF Scheme if its expense ratio is lower.	5.720	1.004	Agree
Ret4	.637	I am likely to invest in a MF Scheme if its performance ratio is higher compared to its peers.	5.920	.9444	Agree

**Table 18: Mutual Fund Schemes Features****Factor 5: Mutual Fund Schemes Features**

Code	Factor Loading	Items	Mean	SD	Opinion
MFSch1	.842	I consider the portfolio of shares investment of the MF scheme	5.268	1.204	Somewhat agree
MFSch2	.849	I consider the Fund size of the MF scheme	5.245	1.912	Somewhat agree
MFSch3	.744	I consider the Net Asset Value (NAV) of the MF Scheme	5.627	1.133	Agree

**Table 19: Asset Management Company (AMC) Performance****Factor 6: Asset Management Company (AMC) Performance**

Code	Factor Loading	Items	Mean	SD	Opinion
AMC1	.668	I check the Brand Name and reputation of the Asset Management Company	5.780	1.391	Agree
AMC2	.588	I consider the research reports published by the Asset Management Company (AMC)	5.468	1.400	Agree
AMC3	.722	I consider the performance of the Asset Management Company (AMC)	5.777	1.285	Agree
AMC4	.708	I consider the Asset Under Management (AUM) size of the Asset Management Company (AMC)	5.535	1.319	Agree

**Findings and Conclusions**

The research work was undertaken with the primary objective to know about the perception of the retail investors towards mutual fund selection and investment. The buying intent of a mutual fund product by a retail investor can be due to multiple factors – Investors Services, Tax Savings, Risk, Return, Asset Management Company, Mutual Fund Scheme Features, Financial Advisors Influences. Retail investors are now turning more to mutual funds because of convenience, higher returns compared to traditional savings instruments with diversification of risk. The Mutual Fund industry needs to help customers understand how its products cater to their needs

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# Impact of Workplace Ostracism on Organizational Culture among Academicians in ED Tech Startups: A Comprehensive Analysis

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## Abstract:

Workplace ostracism, defined as the experience of being excluded, ignored, or socially isolated by colleagues, has significant implications for employee well-being and organizational outcomes. This research paper explores the relationship between workplace ostracism and organizational culture among academicians working in educational technology (Ed Tech) startups. The study employs a quantitative methods approach, utilizing quantitative surveys, to gather comprehensive data from academicians in Ed Tech startups. The primary objectives are to assess the prevalence of workplace ostracism, examine organizational culture in mitigating or exacerbating ostracism experiences. The quantitative phase involves surveying a sample of academicians to measure the incidence and perceived impact of workplace ostracism. The survey also assesses various aspects of organizational culture, such as openness, collaboration, supportiveness, and inclusivity. Statistical analyses, including correlation and regression analysis, will be conducted to identify relationships between workplace ostracism and organizational culture. The findings from this study will contribute to the existing literature by shedding light on the prevalence and impact of workplace ostracism in the specific context of Ed Tech startups. Furthermore, it will provide insights into the role of organizational culture as a potential buffer or exacerbator of workplace ostracism among academicians. The results will have practical implications for organizations in the Ed Tech sector, informing the development of strategies and interventions aimed at creating inclusive work environments that foster employee well-being, satisfaction, and productivity.

**Originality:** Present study is an original research work.

**Keywords:** workplace ostracism, organizational culture, academicians, Ed Tech startups.

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## Introduction

In the rapidly evolving field of educational technology (Ed Tech) startups, academicians play a crucial role in developing innovative solutions to enhance learning experiences. However, the unique dynamics of these startups and their organizational cultures can impact the experiences of academicians within the workplace. One significant challenge that academicians may face is workplace ostracism, which refers to the act of excluding or ignoring individuals within a professional setting.

Workplace ostracism, a phenomenon encompassing exclusion, neglect, and the silent treatment within the professional sphere, is an intricate issue that significantly impacts the well-being and productivity of academicians. In the unique context of Ed Tech startups, where the fusion of education and technology propels innovation, the relationship between workplace ostracism and organizational culture among academicians assumes particular importance. This introduction explores the multifaceted dimensions of workplace ostracism, its potential prevalence among academic professionals in Ed Tech startups, and the interconnectedness of this phenomenon with the prevailing organizational culture.

The academic landscape is undergoing a transformative shift with the emergence of Ed Tech startups, where the convergence of education and technology promises groundbreaking advancements. However, amidst the fervor of innovation, the intricate dynamics of workplace interactions come to the fore. Workplace ostracism, often subtle and insidious, can erode the collaborative spirit crucial for academic progress. As academicians navigate the complex terrain of Ed Tech startups, understanding the relationship between workplace ostracism and organizational culture becomes paramount for fostering a conducive work environment.

To comprehend the nuanced connection between workplace ostracism and organizational culture, it is imperative to define and contextualize these concepts within the academic realm of Ed Tech startups. Ostracism, as described by Ferris, Brown, Berry, and Lian (2008), involves the "deliberate exclusion of an individual or individuals from the workplace social network by other organizational members." This exclusionary behavior

manifests through subtle acts such as ignoring, excluding from social events, or withholding information, creating a sense of isolation and undermining the targeted individual's sense of belonging within the workplace.

In the context of academic professionals within Ed Tech startups, the implications of workplace ostracism can extend beyond personal well-being to impact collaborative efforts, innovation, and ultimately the success of the organization. Scholars such as Robinson, O'Reilly, and Wang (2013) emphasize the detrimental effects of ostracism on employee morale, job satisfaction, and overall organizational performance. Understanding the intricacies of workplace ostracism is crucial for Ed Tech startups striving to create environments that foster creativity, collaboration, and sustained academic excellence.

The organizational culture of Ed Tech startups serves as the backdrop against which workplace ostracism unfolds. Organizational culture, as defined by Schein (1992), represents the "shared basic assumptions, values, and beliefs that characterize an organization." In the context of Ed Tech startups, where the synergy of academia and technology prevails, the organizational culture becomes a potent force shaping the behaviors, norms, and interactions of academicians. The organizational culture influences how individuals perceive, interpret, and respond to workplace dynamics, thus playing a pivotal role in either mitigating or inadvertently fostering workplace ostracism.

The interplay between workplace ostracism and organizational culture is underscored by the potential existence of a significant relationship and positive correlation among academicians in Ed Tech startups. As highlighted by Duffy, Ganster, and Pagon (2002), a positive correlation indicates that as instances of workplace ostracism increase, specific traits or characteristics within the organizational culture become more pronounced. This correlation prompts a critical examination of the cultural elements that might inadvertently contribute to or deter workplace ostracism within the unique ecosystem of Ed Tech startups.

Ed Tech startups, by nature, embody a fusion of academic rigor and technological innovation. The academic professionals within these startups are at the forefront of reshaping educational paradigms. However, the positive correlation between workplace ostracism and organizational culture suggests that the organizational culture might inadvertently hinder or facilitate the collaborative efforts of these academicians. The prevalence of ostracism can act as a barometer, reflecting the inclusivity or exclusivity embedded in the organizational culture, influencing the academic professionals' experiences within Ed Tech startups.

Intriguingly, the academic realm within Ed Tech startups is not exempt from the broader discourse on workplace ostracism. Researchers such as Andersson and Pearson (1999) argue that ostracism can be more harmful than overt aggression because it is difficult to detect and can have lasting psychological effects. The potential implications of workplace ostracism within Ed Tech startups extend beyond individual experiences, touching the core of organizational effectiveness and the ability to attract and retain top academic talent.

This introduction lays the foundation for a comprehensive exploration of the relationship between workplace ostracism and organizational culture among academicians in Ed Tech startups. It underscores the significance of understanding workplace ostracism within the broader context of organizational culture and its potential impact on the innovative and collaborative endeavors of academic professionals. The subsequent sections will delve into the specific dimensions of this relationship, examining how organizational culture influences the prevalence of workplace ostracism and proposing strategies to foster inclusive cultures within Ed Tech startups.

### **Purpose of the Study**

The purpose of researching workplace ostracism and organizational culture among academicians in Ed tech startups is to gain a deeper understanding of the dynamics and impact of these factors on employees and the organization as a whole. Overall, the research aims to shed light on the relationship between workplace ostracism and organizational culture within Ed tech startups. By understanding these dynamics, organizations can foster a positive work environment, enhance employee satisfaction and engagement, and ultimately improve organizational performance.

### **Methodology**

- *Objective of the Present Study*  
To study the association between workplace ostracism and organizational culture among academicians of EdTech Startups.
- *Hypotheses of the Study*  
There will be a significant relationship between workplace ostracism and organizational culture among academicians of EdTech startups.

- *Research Design*  
A Correlational design was used for the present study.
- *Participants*  
A sample of 200 participants working in the EdTech sector belonging to the age group 30-45 years having a minimum of 5 years of experience were taken from the Delhi NCR region. All the participants taken for the present study have masters as their minimum qualification.
- *Tools Used*  
**Workplace Ostracism Scale (2008):** Workplace Ostracism (Ferris et al., 2008) is a uni-dimensional scale comprising 10 items. This is a five-point Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Some sample items are “others avoided you at work”, “others at work stopped talking to you”; “others refused to talk to you at work”. The cronbach alpha of this scale is 0.90. Though no study based on workplace ostracism conducted in the Indian context, it has been studied abroad in an organizational set up (Williams, 2007; Wu, Yim, Kwan, & Zhang, 2012).  
**Organizational Culture Questionnaire (2009):** This questionnaire was developed and standardized by Singh & Mishra (2009) to measure the organizational culture. This is a ve point Likert-type rating scale having a total of 18 items. The 18 items which were related to the following areas- pressure, engagement, freedom and challenging work. Each statement has ve response alternatives, namely, strongly agree, agree, undecided, disagree, and strongly disagree. The items of the scale were framed in such a way that they can be used for measuring the organizational culture.
- *Procedure*  
For the collection of the data, all the participants were individually contacted and rapport was established with the participants by making them feel comfortable. After the establishment of rapport, the questionnaire was handed over to the participants. After the completion of the questionnaires, questionnaires were taken back and the participants were thanked for their precious time devoted and for the cooperation. The data was analyzed with the help of Pearson product moment correlation.
- *Statistical Analyses*  
For attaining the objective of the present study, collected data was recorded for the statistical analysis. A Pearson product moment correlation was used for attaining the objectives of the study.

## Results and Discussion

**Table 1: Demographic Details of Participants**

Demographic Details	Participants
Total participants	200
Gender	
-Male	100
-Female	100
Work experience (years)	Minimum 5
Location	Delhi NCR
Age Group	30-40
Minimum Educational Qualification	Masters

**Table 2: Descriptive Statistics of Workplace Ostracism and Organisational Culture**

		WO	OC
N	Valid	200	200
	Missing	0	0
Mean		22.000	49.020
Median		20.000	48.000
Mode		20.0	48.0
Std. Deviation		6.3086	2.3595
Range		24.0	8.0

Table 2 shows the descriptive statistics of work ostracism and organizational culture. In this table, we can see mean values of work ostracism (Mean = 22.00; Median = 20.00; Mode= 20.00; SD = 6.3086; Range= 24.00) and organizational culture ((Mean = 49.020; Median = 48.00; Mode= 48.00; SD = 2.3595; Range= 8.00). Rest of the results is shown in table 3.

**Table 3: Showing Inter Correlational Matrix between Workplace Ostracism and Organizational Culture (N=200)**

		<b>WO</b>	<b>OC</b>
<b>WO</b>	Pearson Correlation	1	.672**
	Sig. (2-tailed)		.000
	N	200	200
<b>OC</b>	Pearson Correlation	.672**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 3 shows the correlation between workplace ostracism and organizational culture. To investigate the association between variables and to check whether the variables are significantly related with each other, Pearson correlation was applied. In the present study, we have found significant relationship between workplace ostracism and organizational culture. Also, there is a positive correlation found between workplace incivility and organizational culture at .01 level which clearly states that workplace ostracism involves the exclusion or neglect of individuals within the work environment. A positive correlation implies that as instances of workplace ostracism increase among academicians in Ed Tech startups, there is a concurrent tendency for specific cultural traits or characteristics to be pronounced within the organization. Unraveling this correlation provides valuable perspectives on the intertwined nature of social dynamics and organizational culture. Firstly, the positive correlation suggests that the organizational culture within Ed Tech startups plays a significant role in shaping patterns of workplace ostracism. If the culture fosters competition over collaboration, individualism over teamwork, or fails to prioritize inclusivity, it may inadvertently contribute to an environment where ostracism becomes prevalent. Moreover, this correlation emphasizes the need to view workplace ostracism as a symptom rather than an isolated issue. The positive correlation, implies that addressing ostracism necessitates a comprehensive approach that considers the broader organizational context. Ed Tech startups need to delve into the roots of ostracism, recognizing and rectifying cultural elements that may be fostering exclusionary behaviors. In the realm of academia within Ed Tech startups, where collaboration and knowledge-sharing are integral, the positive correlation between workplace ostracism and organizational culture signals potential impediments to achieving the collaborative spirit necessary for innovation. A culture that values every academician's contribution, promotes open communication, and discourages exclusionary practices becomes imperative for the sustained success of Ed Tech startups. Furthermore, the correlation between workplace ostracism and organizational culture highlights the impact on the well-being and job satisfaction of academicians. Continuous experiences of ostracism can lead to feelings of isolation, anxiety, and diminished morale among employees. In the competitive landscape of Ed Tech startups, where attracting and retaining top talent is crucial, addressing workplace ostracism becomes pivotal for maintaining a motivated and engaged academic workforce. In conclusion, the significant relationship and positive correlation between workplace ostracism and organizational culture among academicians in Ed Tech startups illuminate the intricate interplay between social dynamics and the broader organizational context.

### **Implications of the Study**

Addressing this correlation requires proactive measures aimed at fostering a more inclusive organizational culture. Ed Tech startups should prioritize creating environments that celebrate diversity, encourage open communication, and establish clear norms against exclusionary practices. Leadership plays a pivotal role in shaping and modeling inclusive behavior, setting the tone for the entire organization. Furthermore, there is a need for targeted interventions in organizational culture. Initiatives such as diversity and inclusion training, mentorship programs, and transparent communication channels can serve as effective tools in mitigating workplace ostracism. By aligning the organizational culture with values that champion collaboration, respect, and inclusivity, Ed Tech startups can cultivate an environment where ostracism is less likely to thrive. Addressing workplace ostracism requires a concerted effort to reshape organizational culture, fostering an

environment where inclusivity and collaboration are not just encouraged but embedded in the core values. By recognizing the cultural factors that contribute to ostracism, Ed Tech startups can create a workplace that not only supports the well-being of academicians but also cultivates a foundation for sustained success and innovation in the competitive landscape of educational technology.

The research paper may contribute to raising awareness about the issue of workplace ostracism among academicians in Ed tech startups. By highlighting the impact of ostracism on employees and organizational culture, it can provide valuable insights to both academics and practitioners in the field.

The findings of the research can help organizations identify areas of improvement in their organizational culture. Understanding the factors contributing to workplace ostracism can enable them to develop strategies to foster a more inclusive and supportive work environment.

Addressing workplace ostracism can have positive implications for employee well-being, job satisfaction, and overall performance. Creating an inclusive culture can enhance engagement and productivity among academicians, leading to better outcomes for the organization.

### **Limitations of the Study**

The research paper's findings may be limited to the specific context of Ed tech startups and academicians. The dynamics of workplace ostracism and organizational culture can differ across industries, job roles, and organizational structures. Therefore, caution should be exercised when applying the findings to other contexts.

The research paper's limitations include a small sample size or potential biases in participant selection, which can impact the generalizability of the results. The study only focuses on a specific region or a handful of organizations, thus the findings may not reflect the experiences of academicians in other locations or organizations.

The research paper's methodology, such as the data collection techniques or measurement tools used, can also introduce limitations. The chosen research design and statistical analyses may also have limitations that affect the validity and reliability of the results.

Establishing a causal relationship between workplace ostracism and organizational culture can be challenging. The research paper may provide evidence of an association, but determining the direction of causality or the underlying mechanisms requires further investigation.

The research paper's findings are based on data collected during a specific timeframe and may not account for potential changes in organizational culture or workplace dynamics over time. Additionally, contextual factors such as industry trends, market conditions, or technological advancements may influence the study's relevance and generalizability.

It is important to consider these implications and limitations while interpreting the research paper's findings and applying them to real-world situations. Further research and replication studies can help address some of these limitations and provide a more comprehensive understanding of workplace ostracism and organizational culture among academicians in Ed tech startups.

### **Conclusion**

The exploration of workplace ostracism among academicians in Ed Tech startups and its intricate relationship with organizational culture unveils profound insights into the dynamics shaping the work environment in these innovative educational settings. This conclusion synthesizes key findings, reflects on the implications of workplace ostracism within Ed Tech startups, and underscores the imperative for cultivating inclusive organizational cultures.

Workplace ostracism, as illuminated by Ferris et al. (2008), encompasses the deliberate exclusion of individuals from the social fabric of the workplace. In the context of academicians in Ed Tech startups, the silent treatment, subtle exclusion, and neglect manifest as potent barriers to collaboration, innovation, and overall organizational success. The positive correlation between workplace ostracism and organizational culture highlights the symbiotic relationship between individual experiences and the broader cultural context.

One of the fundamental insights gleaned from the exploration of workplace ostracism among academicians in Ed Tech startups is the interconnectedness between organizational culture and the prevalence of ostracism. As emphasized by Schein (1992), organizational culture represents shared assumptions, values, and beliefs that shape the behaviors and interactions within an organization. In the context of Ed Tech startups, where the fusion of academia and technology catalyzes innovation, the organizational culture becomes a critical factor influencing the experiences of academic professionals.



The positive correlation between workplace ostracism and organizational culture, as suggested by Duffy et al. (2002), implies that the cultural fabric of Ed Tech startups plays a pivotal role in either mitigating or inadvertently fostering ostracism. The organizational culture becomes a lens through which academicians interpret their workplace interactions, influencing their sense of inclusion, belonging, and overall job satisfaction. As the culture becomes more pronounced, so too does the potential for workplace ostracism, creating a ripple effect that resonates throughout the organization.

This correlation prompts a nuanced examination of the cultural elements within Ed Tech startups that may contribute to or deter workplace ostracism. The unique ecosystem of Ed Tech startups, characterized by a blend of academic rigor and technological innovation, necessitates a keen understanding of the organizational culture's impact on interpersonal dynamics. The academic professionals within these startups are not only contributors to knowledge but also active participants in shaping the cultural norms that govern their work environment.

The prevalence of workplace ostracism within Ed Tech startups can act as a barometer, reflecting the inclusivity or exclusivity embedded in the organizational culture. Andersson and Pearson (1999) argue that ostracism, often subtle and difficult to detect, can be more harmful than overt aggression. In the context of academic professionals with a minimum of 5 years of work experience and a master's qualification, the potential negative repercussions of workplace ostracism are magnified. These experienced professionals, vital for the success of Ed Tech startups, bring a wealth of knowledge and expertise that can be stifled in an environment tainted by ostracism.

The academic realm within Ed Tech startups, poised at the intersection of education and technology, demands a culture that nurtures collaboration, creativity, and a sense of belonging. Workplace ostracism becomes a hindrance to these aspirations, inhibiting the free flow of ideas and impeding the collaborative efforts necessary for innovation. The positive correlation indicates that addressing workplace ostracism necessitates a strategic and cultural shift within Ed Tech startups, aligning the organizational culture with values that champion inclusivity and collaboration.

Furthermore, the positive correlation accentuates the impact of workplace ostracism on the well-being and job satisfaction of academic professionals. As Robinson et al. (2013) highlight, ostracism can lead to diminished morale, decreased job satisfaction, and overall negative effects on organizational performance. In Ed Tech startups, where attracting and retaining top talent is paramount for sustained success, the well-being of academic professionals becomes integral to organizational effectiveness.

The imperative for Ed Tech startups lies not only in recognizing the correlation between workplace ostracism and organizational culture but also in taking proactive measures to foster inclusive cultures. The organizational culture should not merely be a reflection of existing norms but a deliberate creation that aligns with the values of collaboration, respect, and inclusivity. Leadership within Ed Tech startups becomes instrumental in modeling inclusive behavior, setting the tone for the entire organization.

Interventions to mitigate workplace ostracism can encompass various initiatives, drawing on the recommendations of scholars in the field. Diversity and inclusion training programs can sensitize employees to the nuances of workplace interactions, fostering a greater understanding of the impact of their behaviors on colleagues. Mentorship programs can provide avenues for support and guidance, creating a sense of community and reducing feelings of isolation. Transparent communication channels, as suggested by Duffy et al. (2002), can be instrumental in addressing concerns and ensuring that all voices are heard within the organization.

In conclusion, the exploration of workplace ostracism and organizational culture among academicians in Ed Tech startups sheds light on the nuanced interplay between individual experiences and the broader cultural context. The positive correlation underscores the significance of cultivating inclusive cultures that not only deter workplace ostracism but also foster an environment conducive to innovation and academic excellence. As Ed Tech startups navigate the evolving landscape of education and technology, the recognition of workplace ostracism as a pivotal concern necessitates a commitment to reshaping organizational cultures, creating spaces where academic professionals thrive and contribute to the transformative potential of these innovative ventures.

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## Empowering Rural Women through ORMAS and Transformation by Mission Shakti in Odisha

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**Abstract:** In the rural state of Odisha, women make up roughly 53.90 percent of the workforce, compared to 46.10 percent of jobless women. The Odisha Rural Development and Marketing Society (ORMAS) have been instrumental in improving the lives of rural women in Odisha through the unique scheme known as Mission Shakti. This study examines how ORMAS affects women's socioeconomic empowerment and entrepreneurship in rural Odisha. Because of ORMAS and Mission Shakti's work, women can now engage in various livelihood activities, such as small-scale industries, agriculture, and handicrafts. Through providing women with training, capital, and market access, ORMAS has helped women become successful company owners who have strengthened local economies. Not only do they work long hours at home, but they also take care of sick individuals, aging parents, and little children. In addition to gathering water for household use, they cook and wash family members' clothing. This labor called the "care economy," is undervalued because it is unpaid and not usually seen as a component of the economy. In addition, their lack of leisure and workload negatively impact their general health and well-being. Women will be liberated if they have the opportunity to become entrepreneurs. This study investigates how self-help organizations support economically disadvantaged rural women in their efforts to become potential business owners. This paper illustrates how ORMAS has improved the lives of rural women in Odisha through a combination of qualitative analysis and case studies, and it offers insights into the critical elements that have contributed to this success.

**Keywords:** Women Entrepreneurs, ORMAS, Mission Shakti, Rural Development

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### Introduction:

Gender equality in India is protected under the Constitution. Human rights and social justice depend on it. Despite the protections provided by the Constitution, rural women face the most significant disadvantage. Decision-making, employment, and self-employment are underrepresented in terms of their benefits. This can only be attributed to cultural conservatism and illiteracy. The government-sponsored programs and employment opportunities available in India, especially those that support self-employment, still need to be fully utilized by them. Thus, as part of the Government of India's different development objectives, they must be motivated and trained to participate in employment-oriented, skill-based training programs. Any welfare state's main task is to end poverty by ensuring and advancing the people's social and economic well-being by the principles of equality. To tackle the problem of unemployment among the nation's expanding population, women at the local level need to be empowered by being included in various economic activities and given the education and opportunities to become potential entrepreneurs.

The self-governing apex organization ORMAS (Odisha Rural Development and Marketing Society) is under the direction of the Odisha government's Panchayati Raj Department. The primary goal of ORMAS is to use cutting-edge technologies to help Odisha's impoverished rural people live better lives. The primary operations of ORMAS's industrial sectors include handicrafts, utility products, and handlooms. In addition to these three products, the Odisha Rural Development and Marketing Society produces small-scale forest and agricultural goods with excellent access to raw materials and labor.

### Historical Context:

The government's Panchayati Raj & Drinking Water Department founded the Odisha Rural Development and Marketing Society (ORMAS) on January 14, 1991, and was incorporated under the Societies Registration Act of 1860. The organization aims to give micro businesses and rural producers various marketing channels to create sustainable livelihoods through suitable rural technology, product development, and diversification with approved designs, packaging, certification, branding initiatives, and other means. "District Supply and Marketing Society" (DSMS) is the term ORMAS uses at the district level. These programs aim to increase impoverished rural people's production, processing, and marketing to enable them to earn a better life. Additionally, DSMSs and ORMAS serve as supporting organizations for the execution and oversight of

programs for rural livelihoods in rural Odisha. In order to build a robust marketing network for rural products, ORMAS and DSMSs have been effectively working for the past 25 years.

Handicrafts, handlooms, and other utility items are the primary products of ORMAS's industrial sectors. In addition to these three products, the Orissa Rural Development and Marketing Society also gathers and handles small-scale forestry and agri-based products, providing a fantastic chance to boost the supply of labor and raw materials. The production of siali and sal leaf plates and cups, hill broom, rock bee honey processing, dal processing, kewda leaf products, and numerous other related activities are the main areas of focus for ORMAS (Orissa Rural Development and Marketing Society) at the moment. Additionally, ORMAS organizes national networking to promote products like tamarind, amla, harida, kalmegh, and other MFPs and medicinal plants. ORMAS has recently moved to market agricultural and rural products like onions, ginger, and turmeric. Exhibitions and Melas have been a component of our culture's entertainment and leisure activities since the middle of the 16th century. To draw in clients, curated products are arranged in an exhibition setting. In order to market rural products produced by rural producers, ORMAS has taken use of this medium. It gives the impoverished in rural areas a chance to engage with metropolitan consumers and sell their goods directly to consumers in large cities. Knowing the tastes and preferences of urban consumers about their products is greatly aided by this. The rural growers can learn a lot from it as well. Additionally, it aids in the identification of sources of income and develops connections with metropolitan and semi-urban markets for rural business owners.

#### **Integration of ORMAS with Mission Shakti:**

The Directorate of Mission Shakti, working with ORMAS, is promoting several livelihood programs and providing marketing support to women SHGs under the project named "Convergence of ORMAS and Mission Shakti for Promotion of Livelihood and Marketing of Rural Products." Apart from facilitating large-scale purchases of rural produce by establishing institutional and corporate partnerships, retail stores, and national, state, and district exhibitions, ORMAS also undertakes a range of activities about state-level marketing of identified rural products in different Odisha clusters. Among these processes are value addition, suitable packaging, labeling, certification, and branding of rural products. By promoting their goods by ORMAS, the project concept seeks to empower female farmers in rural areas.

This is because finding a market for their products is imperative for these groups of women producers. In order to create micro-enterprises, the project aims to increase the resources available to work in all blocks where there is a chance to do so. It will specifically focus on forming and promoting new Women Producer Groups (PGs), marketing and technology interventions, adding value through institutional capacity building, and strengthening the current business incubation centers to support SHGs and PGs in developing their capacity. Through the following methods, the project will provide training and make access easier: (i) exhibits both inside and outside the state; (ii) locating potential customers; (iii) forming marketing partnerships with potential customers for the sale of rural produce; (iv) buyer-seller meetings arranged by zone in cooperation with purchasers from a variety of industries, including corporate houses, retail stores, traders, and exporters for the sale of rural products; and (v) bolstering the incubation centers that are already in place. Finance two unique projects in the districts of Kendrapara and Sambalpur, respectively, on the construction of Aggregation and Processing Centers for NTFPs in Sambalpur and Common Facility Centers in Kendrapara; and expose PGs and WSHGs both inside and outside the state to marketing and livelihood activities.

#### **Literature Review:**

##### **Empowerment Model for Self-Help Groups:**

Throughout the past twenty years, the word "empowerment" has been frequently utilized for the advancement of women. A concept such as "welfare," "emancipation," "development," and "upliftment" all imply it. During the 1990s, women's empowerment emerged as a fitting alternative to each of these phrases. "Care" and When the phrase "empowerment" first evolved, it was interpreted as "development." Participation is critical to empowerment, as the Human Development Report 1995 emphasized. According to this report, development must be done by the people, not just for them. According to the UN (1995), people must actively engage in the choices and procedures affecting their lives.

Empowerment requires that people fully participate in creating, carrying out, and evaluating decisions that affect how societies function. This was stated unequivocally at the 1995 World Summit on Social Development (WSSD), which produced the Copenhagen Declaration. (Kalpana, 2005). Feminist activists emphasize that males should be freed from the erroneous value systems that are pervasive in patriarchal culture as a result of women's empowerment. Regardless of gender, it needs to result in a state where everyone can develop into a "whole being" and use their most significant potential to create a more compassionate society (Batiwala, 1993). The Human Development Report 1995, published by the United Nations Development Program, lists

empowerment as one of the four essential elements of the human development paradigm, along with productivity and equity.

### **Governmental Programs for Self-Help Organizations:**

Senapati, A. K., & Ojha, K. (2019) discovered that microcredit without collateral is the primary driver of improving women's economic circumstances, regardless of their level of education. According to Srivatsala, B. (2018). Women Self-Help Groups (WSHG) run various micro-businesses in developing countries like India in the twenty-first century. Dhekale (2016) asserts that rural women entrepreneurs contribute monetarily to the welfare of their families and the community. They create jobs for other people as well as for themselves.

In 2014, Hemant Kumar *et al.* Gandhi. Evaluated the entrepreneurial activities of rural women and enhanced the measure of their economic and social welfare. They argue that female entrepreneurs encourage the growth of the labor force. Like their male counterparts, they substantially contribute to the country's GDP. However, most urban middle-class women gain from government-funded development initiatives. According to research by Rajasekaran and Sindhu (2013), providing microcredit without collateral has helped rural women become more accustomed to working for themselves in the twenty-first century. They also showed they are equally capable of managing entrepreneurial ventures alongside men. Pandey and Roberts (2012) claim that becoming a member of a SHG has improved rural women's social and economic standing.

### **Self-Help Organizations as a Mechanism for Administration:**

Self-help groups, or SHGs for short, are a concept that is already widely known. It is already more than twenty years old. It is said that SHGs contribute to the country's financial growth. Today, SHGs are becoming a movement (Das, 2009). Self-help organizations exist "for the people, through and for the people." Mohammed Yunus, a professor at Chittagong University, launched the Grameen Bank of Bangladesh in 1975, which inspired the self-help organization.

The "for the people, by the people, and of the people" is central to the self-help group concept. This self-help group was inspired by the Grameen Bank of Bangladesh, founded in 1975 by Mohammed Yunus, a professor at Chittagong University. 1992 saw the start of the SHG Linkage Project in India by the National Bank for Agricultural and Rural Development (NABARD). The Self-Help Group (SHG) movement began as a small pilot project. However, it grew into the world's largest and richest network of community-based groups because of the active assistance of the government, banks, development agencies, and non-governmental organizations (Tripathy, 2008).

Self-help groups form spontaneously within official organizations. Self-help groups form spontaneously within official organizations. Ten to twenty people make up an SHG. Regular saving is advised for the members.

They pool their resources to satisfy each group member's credit requirements. The groups are homogeneous and cohesive, one of their defining characteristics. They are democratic and reach decisions jointly because their members are neighbors and share interests. The main characteristics of the SHG include systematic training, mandatory attendance, regular savings, regular meetings, and appropriate repayment (Dasgupta, 2005). Many of the components of social movements that aim to give women in the community a political voice are incorporated into self-help models.

Women have been involved in various social movements and agitations in recent years. Over the past ten years, Self-Help Groups (SHGs) have been one of Odisha's most rapidly expanding and promising solutions that tackle poverty reduction and women's development. This movement was started in the middle of the 1990s by organizations. CYSD, GramaVikas, PREM, and Fellowship worked toward the goal above in the early 1990s (Rath, 2016). The self-help group idea started gaining traction in rural Odisha in the mid-1990s. Since then, the state has seized the opportunity to realize the potential of the Self-Help Group movement and has built new groups while improving existing ones.

The state's foremost defender of women's empowerment initiatives is the Government of Odisha's Women and Child Development Department. The state's women's development programs aim to empower women on the social, political, and economic fronts. A structured approach In 2001, Mission Shakti was established to focus on women's empowerment. Since then, the WCD Department's objective of helping rural women has been achieved most successfully through Self-Help Groups (Pattnaik, 2012). Initiatives for women's capacity building, health, adolescent development, and sexual abuse are now connected to the WCD Department's Self-Help Group program. Swayamsidha, Rashtriya Mahila Kosh, SGSY, and Mission Shakti have all recently had an effect.

### **Factors Contributing to the Empowerment of Rural Women:**

**Building Capabilities:** Through training programs, Mission Shakti and ORMAS aim to increase the capacity of rural women. Women can enhance their existing skills, pick up new ones, and develop the confidence necessary to seek jobs in entrepreneurship through these programs.

**Resources Accessible:** ORMAS and Mission Shakti offer markets, loans, inputs, and other resources to women living in rural areas. Because of this accessibility, women are better able to start and grow their businesses, which boosts their income and financial independence.

**Collaborative Accomplishment:** Mission Shakti founded women's self-help groups (WSHGs), which promote cooperative action among rural women. Women can gain more influence when they band together to share information, pool resources, and support one another.

**Associations with Markets:** Rural women are assisted by Mission Shakti and ORMAS in finding markets for their goods. In addition to raising women's incomes, this access broadens their perspectives and improves their commercial acumen.

**Sustaining Policies:** The Odisha government has launched ORMAS and Mission Shakti, which promote women's empowerment. These regulations create an atmosphere that encourages women to participate in the market and obtain resources.

**Community Participation:** Projects like ORMAS and Mission Shakti can only be successful with the participation of the local communities. With the community's assistance, women can overcome social barriers and participate fully in the business.

**Monitoring and Evaluation:** To ensure the ORMAS and Mission Shakti initiatives continue to be successful and sensitive to the needs of rural women, they undergo routine monitoring and evaluation. This broadens the range of feasible alternatives and aids in identifying problem areas.

**Women's Control:** Mission Shakti and ORMAS provide numerous forms of support for women leaders. Thanks to these programs, women may take on leadership roles and make decisions that impact their communities and way of life.

### **Justification of the Research:**

Discussing how groups like Mission Shakti and the Odisha Rural Development and Marketing Society (ORMAS) empower Odisha women living in rural areas is vital.

**Impact on the public:** The methods in which ORMAS and Mission Shakti have improved the socioeconomic status of women in rural Odisha can be better understood by examining their effects on women in that region. In order to create programs that empower women, policymakers and development specialists must be cognizant of these ramifications.

**Gender Parity:** The study can help determine how much ORMAS and Mission Shakti have contributed to gender equality in rural Odisha. This is especially important in an environment where women frequently experience economic and social disadvantages.

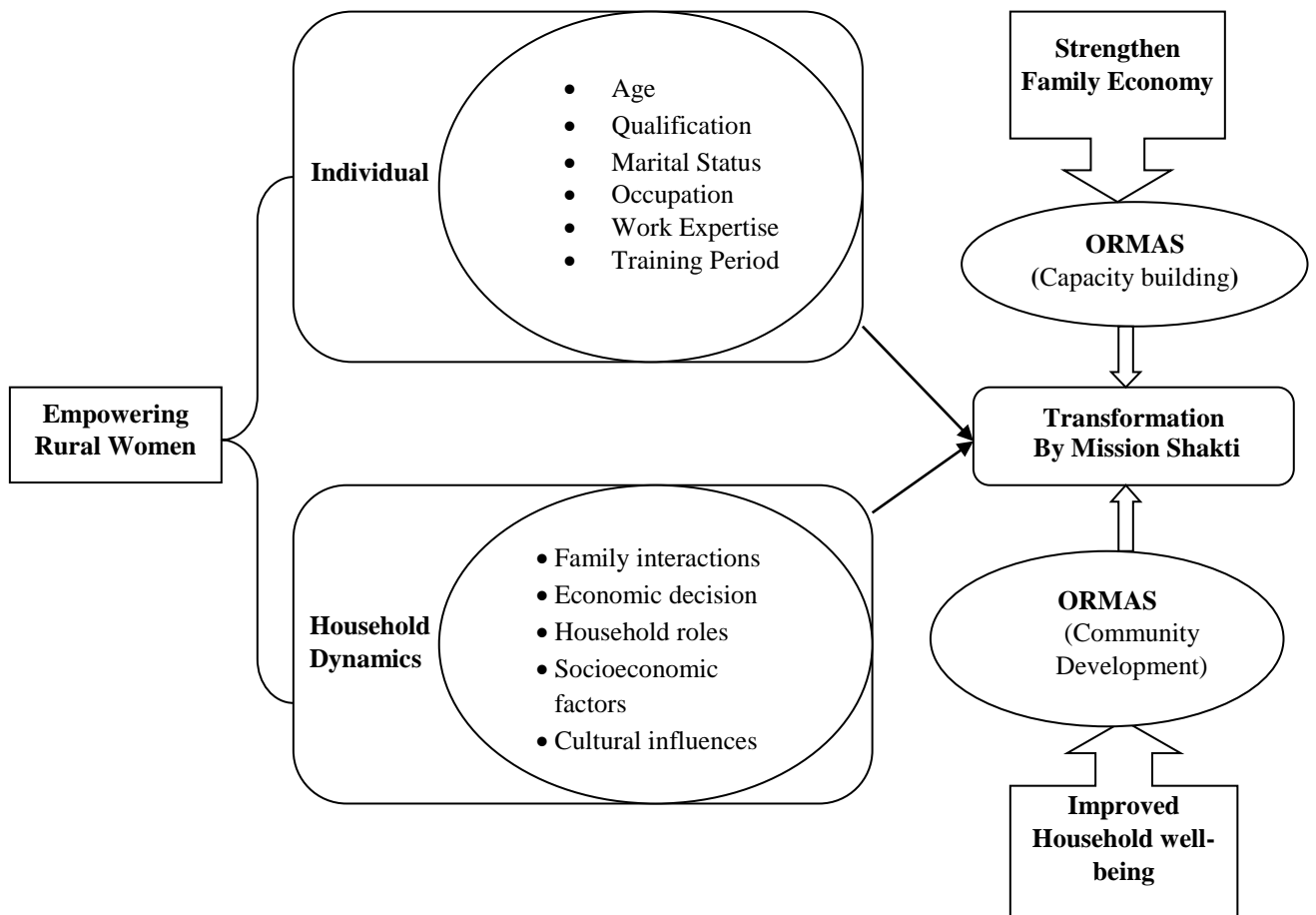
**Strategy Implications:** The study's conclusions can guide future choices regarding women's empowerment and rural development in Odisha and other regions with comparable conditions. Legislators and practitioners may use this to create more sensible laws and make wiser financial judgments.

**Contribution to Educational Research:** The research can enhance the existing corpus of information on women's empowerment and rural development by furnishing factual data on the results of specific initiatives such as ORMAS and Mission Shakti.

**Research Objective:** Primarily, the marketing and promotion of rural products is the main emphasis of this study's analysis of the Odisha Rural Development and Marketing Society (ORMAS) operations. One of the other objectives is to evaluate how ORMAS-organized exhibitions affect women in rural areas. ORMAS is crucial in enhancing market access for rural products, even though exhibitions provide a platform for rural producers to showcase their goods and interact with potential buyers. A thorough understanding of these aspects can help illustrate how ORMAS promotes women's empowerment and rural development in Odisha.



**Figure 1: Conceptual Framework for Empowering Rural Women**



**Source: Authors Own Creation**

**Research Methodology:** The study will employ a qualitative research methodology to understand better how Mission Shakti and ORMAS in Odisha empower women living in rural areas. Purposive sampling will be employed to select research participants engaged in ORMAS and Mission Shakti initiatives. Rural women, ORMAS representatives, and local leaders will be among them. When no new information arises from interviews or conversations, the sample size will be decided based on data saturation. The study will employ semi-structured interviews, focus groups, and the examination of pertinent documents, including policy documents and program reports, to gather data. A total of 330 sample sizes is gathered for the research. If participants agree, audio recordings of interviews and conversations will be made, and the transcripts will be analyzed. We will evaluate the qualitative data using thematic analysis. Learning more about how ORMAS and Mission Shakti empower rural women entails spotting trends, topics, and categories in the data. The study may have problems related to participant selection bias, qualitative data processing subjectivity, and findings' applicability in other situations. In the research report, these limitations will be recognized and discussed. The study has been conducted based on the acquisition of pertinent secondary data. The secondary data was gathered from various sources, including articles from websites, magazines, and publications and pieces from other journals and newspapers. Period: Information from the Pallishree Mella exhibition (2003–04 to 2019–20) and the Sisir Saras exhibition has been gathered for research purposes.

### **Data Analysis and Interpretation**

**Exhibition Successful Strategy for Market Promotion:** Exhibitions are routinely held at various points during the year to allow rural producers to sell their goods in urban marketplaces, engage in peer-to-peer learning, and raise awareness of rural goods among urban consumers. In order to increase participation, ORMAS regularly hosts exhibitions at the state and national levels on significant occasions like festivals. Generally speaking, ORMAS holds three distinct exhibition types: SARAS, Gramshree Mela, and Pallishree Mela. For the past 26 years, ORMAS has held exhibitions in most of the cities in Odisha under the moniker "Pallishree Mela." The

term "Pallishree," which translates to "Wealth of Villages," gives impoverished rural people the chance to sell their goods directly in large cities and engage with urban consumers, allowing them to learn about and understand their likes and preferences. As a result, it assists businesses in improving and developing their goods, customer service abilities, and ability to cater to urban consumers, all of which help them increase their customer base. In Orissa, it has nearly become customary for ORMAS Exhibitions to be a mandatory component of celebrations during significant local festivals, much to the excitement of both vendors and consumers.

**Table 1: ORMAS's Performance during the Pallishree Mela**

Sl. no	Year	"No. of Exhibitions organized"	"No. of Mission Shakti(SHG) participated"	"No. of participants"	"Total sales (Rs. in lakhs)"
1	2003-04	6	1060	2642	150.39
2	2004-05	10	1144	2765	252.45
3	2005-06	9	2051	2267	332.72
4	2006-07	20	3310	6078	1206.34
5	2007-08	20	3120	5820	1006.34
6	2008-09	22	3348	7365	1468.51
7	2009-10	28	4128	8307	1728.28
8	2010-11	28	4020	7573	1723.98
9	2011-12	28	3940	6854	2007.19
10	2012-13	27	4500	8702	2911.23
11	2013-14	22	3535	7365	3347.31
12	2014-15	28	4604	9244	3913.77
13	2015-16	30	5181	10052	5148.37
14	2016-17	26	4596	8067	5569.30
15	2017-18	28	4866	9863	6371.90
16	2018-19	29	4340	9383	7583.95
17	2019-20	28	5130	9423	8427.35
<b>TOTAL</b>		<b>389</b>	<b>62873</b>	<b>121770</b>	<b>53149.38</b>

Source: <http://www.ormas.org/content/20/16>

A list of all the exhibitions organized by ORMAS under the "Pallishree Mela" that took place in Odisha between 2003–04 and 2019–20 is provided in Table 1. These shows have significantly contributed to the empowerment of rural women through Mission Shakti, a women-led effort focused on socioeconomic development and poverty alleviation in rural Odisha. The growing number of exhibitions that ORMAS has arranged over the years suggests that the group places a high value on giving rural women a venue to present their goods and engage with urban customers. With the addition of six exhibitions in 2003–04, ORMAS now hosts 28–30 exhibitions a year. This trend demonstrates the organization's dedication to encouraging rural entrepreneurship and state economic prosperity.

The involvement of Mission Shakti (SHG) members in these initiatives is one of the primary markers of their impact. According to the data, the number of SHG members has increased significantly, from 1,060 in 2003–04 to over 5,000 in recent years. The increasing interest and participation of rural women in these performances indicates that they are becoming more conscious of the economic and empowerment potential these programs offer. Over 9,000 people have participated in these concerts in recent years, up from 2,642 in 2003–04. The overall number of participants has climbed steadily over time. The increasing number of participants reflects the show's growing effect and reach in bridging the gap between rural and urban producers and consumers. It also suggests a shift in support of regional, sustainable, and community-based initiatives, indicating a better understanding and acceptance of products made by rural women. One interesting finding about the increase in overall sales as a result of these shows is seen in Table 1. In 2003–04, total sales were Rs. 150.39 lakhs; however, they have climbed to almost 8,000 lakhs in recent years. This significant sales rise highlights the importance of ORMAS in promoting market links and boosting rural entrepreneurship, in addition to the financial benefits to the rural women who participated in these displays.

Apart from their economic impact, these shows have gained significance in Odisha culture. Table 1 shows that ORMAS displays have become more common during major local events. The cultural integration of the exhibitions into the community highlights how well-liked and accepted both creators and visitors find them to be. It also demonstrates the significance of these events for developing and preserving local handicrafts, artwork, and traditions. Table 1 provides compelling evidence of ORMAS's exhibitions empowering rural women in Odisha. The rise in overall revenue, SHG participation, exhibitions, and participation rates demonstrate these initiatives' increased effectiveness and success. They enable rural women to become change agents in their communities by giving them access to economic possibilities and other types of empowerment. These ladies are improving their quality of life and helping Odisha's economy flourish by exhibiting their goods and mingling with city dwellers.

**Figure-2: Year Wise Sale Performance by ORMAS**

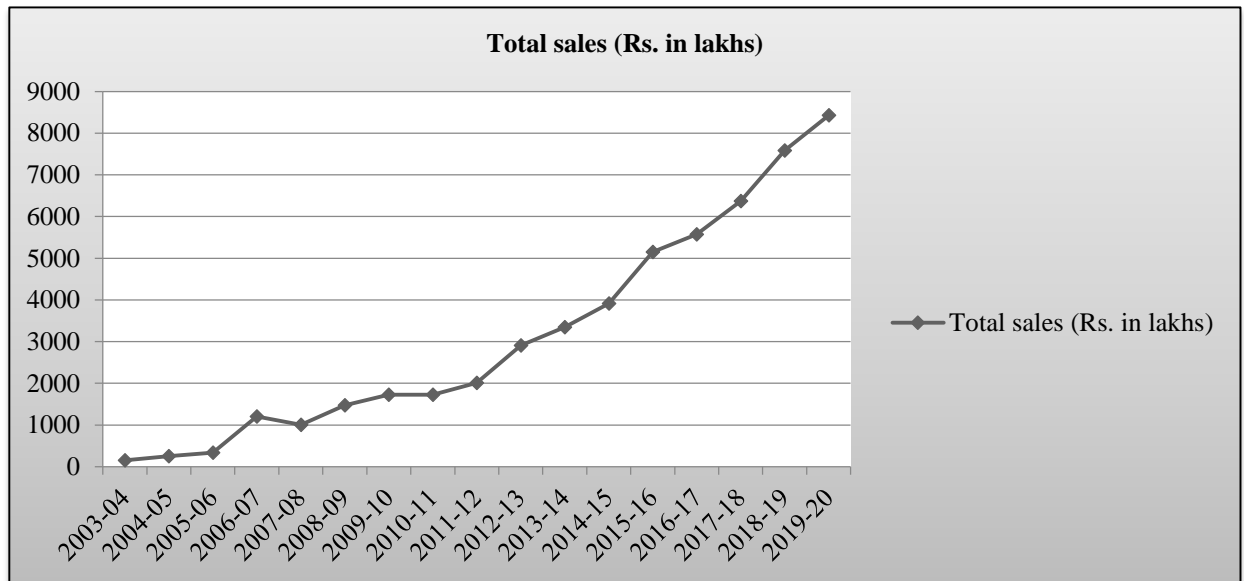


Figure 1 illustrates ORMAS's total sales (in lakhs of Rupees) from 2003–04 to 2019–20. A steady increase in sales, a sign of the company's increased performance, can be observed. Even if growth rates occasionally fluctuate—notable peaks occurred in 2006–07 and between 2012–13 and 2019–20, in particular—the overall direction shows upward momentum. The execution of new marketing tactics, a varied product portfolio, increased demand for rural products, better infrastructure, and government backing have contributed to this fantastic rise. The consistent expansion of ORMAS highlights the organization's important role in promoting marketing campaigns and rural development in Odisha, demonstrating its successful contribution to the region's economic development.

**Figure 3: No of Mission Shakti (SHG) Participated**

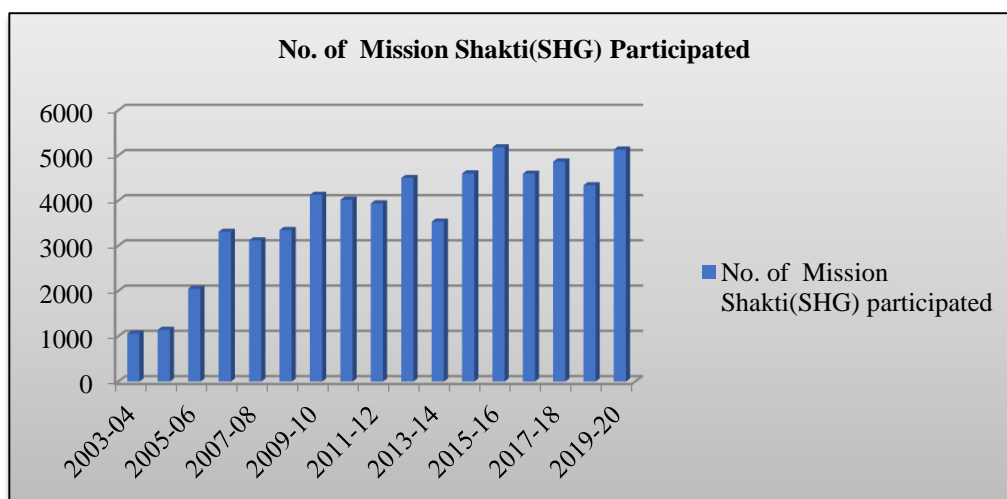


Figure 2 summarizes the evolution and outcomes of the Mission Shakti program throughout time, emphasizing the mobilization of women via Self-Help Groups (SHGs). The program's progressively increasing number of SHGs proves it effectively empowers women and promotes self-reliance in rural communities. Although there are variations in the number of participants, these variations are typical in development programs. Various causes, including changes in program implementation tactics, local economic situations, or awareness campaigns, can cause them. The notable increase in participation between the fiscal years 2005–06 and 2006–07 highlights a phase of prosperous growth and elevated involvement with women's groups, potentially propelled by enhanced outreach initiatives and heightened cognizance of the advantages of Self-Help Groups. Mission Shakti has successfully advanced self-help, entrepreneurship, and women's empowerment in rural areas, as seen by the overall upward trend in SHG involvement. Sustained backing and well-planned interventions have the potential to augment the program's influence, thereby bolstering inclusive growth and sustainable development in Odisha.

#### **Achievement of Pallishree Mela:**

Using past experiences, business facilitation aims to generate a total business volume of Rs50 crores for about 12,000 rural disadvantaged people. Enhancing economic activity and improving rural residents' quality of life are anticipated outcomes of this endeavor. Furthermore, as dynamic Self-Help Groups (SHGs) introduce new items at various shows, additional rural organizations are expected to be encouraged and inspired to follow suit, bolstering microenterprise initiatives. Rural women and other underrepresented groups will likely feel more confident after participating in local and national exhibitions. These shows will also help existing microenterprises grow and sell more often, enhancing production volumes.

#### **Advantages of Exhibition:**

An exhibition is a collection of objects shown in an orderly manner. It is common for people in our culture to unwind and find amusement. ORMAS has used this medium to promote its products. It aids in displaying, demonstrating, and selling the products made by the rural poor in urban markets. It gives the producers and artisans exposure and educates them about consumer preferences and trends. In the long run, it helps to provide livelihood opportunities for the rural poor. Interacting with prospective clients facilitates the acquisition of large orders and concepts for product creation based on market needs. Also, it facilitates the exchange of knowledge regarding product development through workshops conducted in conjunction with the show. Ultimately, we are sharing knowledge and ideas about people, art and craft, culture, tastes, demand patterns, customs, and traditions to aid in their preparation for high-quality participation in upcoming events.

#### **Conclusion:**

The collaboration between ORMAS and Mission Shakti has been crucial to the community transformation and rural women's empowerment in Odisha. Women have become more economically independent and self-assured and have positively impacted their communities through programs such as self-help groups (SHGs), business facilitation, and exposure to new prospects. The support, tools, and market connections provided by ORMAS have been essential for women to launch and grow their enterprises. Mission Shakti's focus on women's leadership, skill development, and capacity building has reinforced this empowerment process.

In general, an exhibition is a purposefully planned arrangement and presentation of certain products chosen by the preferences and tastes of the wider public. In our society, exhibitions and Melas have long been considered leisure pursuits and places to have fun. By using this platform, ORMAS has done a great job of promoting rural products manufactured by institutions of poverty. Exhibits have been vital in building a relationship between ORMAS and consumers, particularly in designing and producing goods appropriate for the given purpose and degree of competence; it is acceptable to assume based on PalliShree Mela's experience. Building on these victories and overcoming any future obstacles is crucial going ahead. This implies expanding access to healthcare and education, providing women with secure means of sustenance, and promoting gender parity in the creation of public policy.

ORMAS and Mission Shakti can effect long-lasting change that benefits not only women but entire communities by continuing to promote the empowerment of rural women. This will help to build a more prosperous and inclusive society in Odisha. Therefore, ORMAS and DSMS should establish a presence throughout Odisha by setting up a steady supply of goods like beans, turmeric, etc., or by opening their stores. It is intended that the organizing effort would become even more strategic in drawing in a sizable number of customers to choose and purchase a product of their choosing. Above all, it will significantly improve the rural entrepreneurs' standard of life and pave the road for a better future.

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## **Social Sell: How Retail Merchants wield Social Media to persuade the Customers**

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### **Abstract**

Through targeted marketing strategies, businesses have been able to manipulate customer behaviour while maintaining control over their image. Social media is an online community where people congregate and exchange information, images, videos, and other types of media. Social media will be used by the shops for client connection management in their merchandising operations. It is used as a tool to analyse customers. This could improve customer loyalty. Social media can be a very helpful tool in today's dynamic lives, but it can also lead to conflicts that can have a detrimental effect on an individual. By focusing on particular goals, this study seeks to investigate social media and the retail industry from all angles. Initially, the research aims to determine which social media sites are most popular among merchants, providing insight into the channels that are most frequently used by the company. It then attempts to evaluate the significant influence that social media has on the overall performance and operational dynamics of retail organisations. Beyond the organisational framework, the study explores brand perception and customer behaviour with the goal of revealing the complex interactions between social media and these factors in the retail setting. The inquiry also looks into the wider range of retail success in an effort to determine how social media influences the course of retail enterprises. The study's overarching objective is to shed light on the intricate web of connections between social media and the retail sector, with consequences for both scholarly research and real-world business plans.

**Keywords:** Social media, Retail business, Retailers, Consumer behaviour, Brand perception.

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### **Introduction**

Businesses all over the world face a lot of challenges when it comes to social media, but very few have figured out how to use these tools successfully to govern their marketing and communication strategies, often opting to use more traditional methods instead (AKRİROUT, 2021).

Reaching a larger spectrum of target clients is one of the most crucial strategic goals for retailers to ensure long-term profitability of their company. It can be done in the modern environment by implementing novel techniques, such as increased online participation (Ali, 2021). This choice is beneficial since it makes switching to new platforms easier, but it also depends on artificial intelligence systems being used (Arango-Botero, 2021). As a result, social media is rapidly altering standard business practices in the retail industry by giving businesses additional chances to boost earnings while gaining access to useful technology solutions (Bianchi, 2018).

Social media's widespread effect has become a disruptive force in today's business environment, changing the retail industry's dynamics (Colicev, 2018). Businesses are becoming more and more aware of the crucial role social media platforms play in influencing consumer behaviour, brand perception, and ultimately the success of retail operations as technology develops (Da Silva, 2017). This research attempts to explore the complex relationship between social media and retail, with the goal of determining which platforms are most popular among retailers and evaluating the significant influence these platforms have on their operational strategies and results. This research aims to provide comprehensive insights that are both academically illuminating and practical for business practitioners navigating the dynamic and interconnected domains of social media and retail. The overarching goal is to unravel the nuanced relationship between social media and consumer behaviour, as well as its role in determining the success of retail businesses.

## **Social Media**

The 20th century saw the introduction of social media into our lives, particularly in 2005–2006, when its use and availability of several social networks made it a significant aspect of our daily lives (Hasanat, 2020). These days, social media not only permeates daily life but also shapes e-commerce's future. Advertisements on social media are more common. The fashion industry is one where advancements occur frequently, and social media is the most affordable and practical means of communication (Jokonya, 2019). Over the past ten years, social media has emerged as a significant marketing tool that offers advertisers numerous chances to raise consumer awareness of their brands in addition to providing an additional marketing dimension (Jordan, 2018). Social media caused a stir in the marketing industry right away because of its capacity to reach large audiences made up of typical consumers (Lu, 2019).

## **Retail business**

The retail industry was undergoing a transition before to 2020. Global merchants are facing enormous hurdles as a result of COVID-19. Some retailers will prosper in its wake, while others may find it difficult to survive (Mainardes, 2019). The public's growing use of the Internet across the globe has sparked this shift, prompting businesses to introduce e-commerce programmes and include the multichannel approach into their business strategies (Mammen, 2019).

## **Impact of Social Media on the Retail Business**

Social media has undeniably altered consumer-company interactions and overall business practices in the retail sector. Social media platforms are dynamic avenues for marketing, communication, and brand promotion that let merchants build relationships with their target market directly (Nash, 2019). Retailers may develop their brand identity, increase awareness, and efficiently convey real-time updates, promotions, and product offerings by using these platforms. Social media has made information more accessible to all, enabling users to make well-informed judgements about what to buy based on suggestions, evaluations from peers, and endorsements from influencers. Furthermore, social media's interactive features enable two-way contact, which helps merchants get insightful feedback, resolve customer issues, and forge closer bonds with their customers (Nasution, 2022). Social commerce has become a major trend that goes beyond marketing and communication, with platforms integrating easy-to-use shopping experiences right within social media ecosystems. Using social media to promote products, increase sales (both in-store and online), build relationships with potential customers, and spread the word about their brand is a great move for retail businesses (Son, 2021). Retail firms that invest time and energy into developing a robust social media marketing plan can reap numerous rewards from social media, including:

- Boost revenue
- Promote by word-of-mouth
- Encourage client loyalty
- Establish a lively online community
- Establish ties with influencers and advocates
- Advertise goods and occasions
- A higher percentage of repeat business

## **Research objectives**

The following is a summary of the study's main goals:

- To determine which social media sites are more popular and favoured by retailers.
- To evaluate how social media affects their firms' operational dynamics and results.
- To look into how social media affects brand perception and customer behaviour in the retail industry.
- To investigate how social media affects retail enterprises' ability to succeed.

## **Review of Literature**

**Ayodeji and Kumar (2019)** concentrate on the social media analytics theoretical framework for online retail. They contend that by better understanding customers through the analysis of social media data, companies can better target their advertising, enhance their product lines, and provide superior customer care. Their study focuses on a number of social media analytics methods that can offer insightful information on consumer

preferences, brand perception, and the competitive environment. These methods include sentiment analysis, social network analysis, and brand monitoring(Ayodeji, 2019).

**Begum, Yavuz, and Piotr (2020)**adopt a more pragmatic stance and concentrate on the effects of social media within the particular setting of retail coffee. Their study shows how coffee companies may interact with consumers on social media, increase brand recognition, and even boost direct sales. They stress the value of social commerce tools, influencer marketing, and user-generated content in promoting coffee goods and building a devoted following(Begum, 2020).

**Dolega et al. (2021)**use a quantitative approach to investigate how social media activity affects a large online retailer's website traffic, orders, and sales. According to their research, there is less of a direct correlation between social media participation and website traffic in terms of orders and sales. Greater relationships between increased orders and sales and Facebook activity and larger campaigns indicate the significance of platform selection and effective targeting. This study offers insightful data-driven information for maximising social media marketing initiatives and assessing their efficacy(Dolega, 2021).

**Haris et al. (2022)**use a qualitative approach and concentrate on how social media usage affects retail customers' emotional attachment indirectly. According to their research, social media usage and emotional attachment are mediated by brand commitment and image. This implies that successful social media marketing techniques can promote favourable brand perceptions and client loyalty, which will ultimately strengthen the emotional ties that consumers have with the brand. This study highlights how crucial it is to have a compelling brand story and engage consumers in ways that go beyond simple transactions(Haris, 2022).

**Mew (2020)**carried out a thorough analysis of social media marketing tactics used by small businesses in the retail sector. Undertaken as a PhD dissertation at Walden University, the study explored the subtleties of how small businesses use social media's ever-changing landscape to improve their marketing strategies. Mew examined the particular opportunities and problems that social media poses for small firms by concentrating on the retail industry. The dissertation offers insightful information about the efficacy of various social media marketing techniques and how small retailers should respond to them(Mew, 2020).

## **Research Methodology**

### ***Study Design***

To achieve its goals, this study takes a quantitative approach. To provide an overview of the current state of social media usage and its influence on shops, a cross-sectional study approach is utilised.

### ***Sampling***

Two hundred retailers who actively use social media for company operations make up the study's sample. The sample was chosen with purpose in mind, concentrating on retailers who use social media sites.

### ***Data Collection***

The main method of gathering data is by giving surveys to the chosen retailers. Each of the study objectives is addressed by the survey's questions, which span topics including preferred social media platforms, perceived operational dynamics and outcomes, customer behaviour, and brand perception.

### ***Research Hypothesis***

**H0A:** Social media has no appreciable impact on consumer choices and brand perception in the retail industry.

**H1A:** In the retail industry, social media has a significant impact on consumer behaviour and brand perception.

**H0B:** The success of retail businesses is not significantly impacted by social media.

**H1B:** Social media has a big impact on retail businesses' ability to achieve success.

### **Variables of the study**

#### **Independent Variable**

##### **Social media**

Social media, the independent variable in this study, is the key component that is purposefully changed and investigated to see how it can affect other variables that fall under the purview of the investigation. The independent variable in the context of merchants using social media for their commercial operations includes a



wide range of platforms, approaches, and interaction techniques. The study attempts to clarify the influence of social media on important elements like consumer behaviour, business outcomes, operational dynamics, and brand perception in the retail industry by methodically altering its presence and use among the chosen sample of merchants. Since social media is dynamic and participatory, it can act as a catalyst for change. The goal of the study is to identify trends, correlations, and causes between the independent variable and the variables that are being studied. Social media is essentially the independent variable that drives the inquiry, enabling a thorough examination of its complex impact on several aspects of the retail sector.

## **Dependent Variables**

### **Success of retail businesses**

In this study, the dependent variable "Success of retail businesses" is a comprehensive measure that reflects the general prosperity and performance of retail businesses. Achieving success is a complex idea that includes things like long-term viability, market share, consumer satisfaction, and financial metrics. By analysing how social media has affected the success of retail businesses, this research hopes to draw conclusions about the nature of the connection between social media usage and the achievement of critical company objectives. This covers elements like revenue growth, market expansion, and building a strong brand image, eventually offering insightful information on what helps or hinders retail enterprise success.

### **Consumer behaviour and brand perception in the retail sector**

The dependent variable "Retail sector consumer behaviour and brand perception" explores the nuances of how customers interact with retail offerings and how social media shapes their opinions. This includes looking at consumer preferences, buying habits, and sentiments on retail brands in general in relation to their online presence. By examining this dependent variable, the research aims to clarify the complex interactions that occur between merchants' social media presence and how customers form their thoughts, decide what to buy, and form impressions of companies in the ever-changing retail industry.

## **Analysis Techniques**

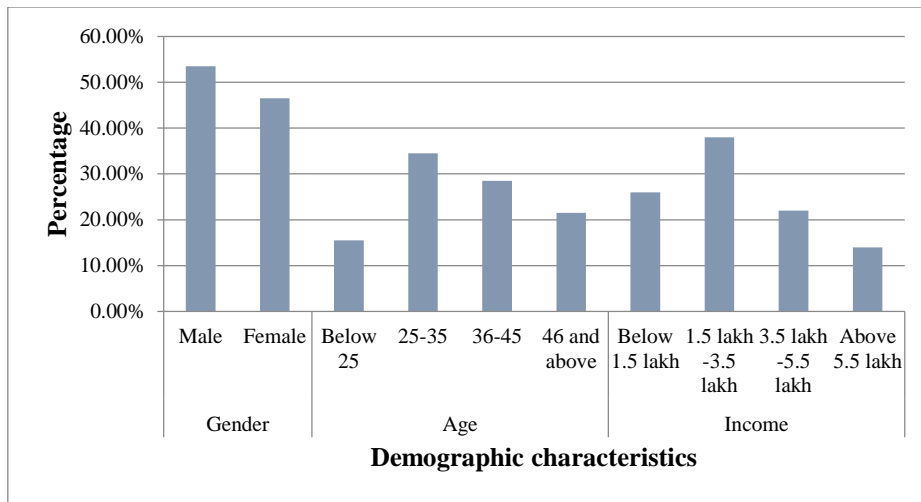
One important statistical technique used in the research to compare various data sets is percentage analysis. This approach works especially well for summarising relationships and giving a relative assessment of the data distribution across different categories. Clear measurements were used, the field data were presented using a PC and the Factual Bundle for Social Science (SPSS 23.0 version), and pertinent hypotheses were tested using regression analysis and Pearson's Relationship and Relapse at the 0.05 alpha level.

## **Data Analysis and Results**

### **Demographic profile analysis**

**Table 1:** Respondents' demographic attributes

<b>Demographic characteristics</b>		<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	107	53.5%
	Female	93	46.5%
<b>Age</b>	Below 25	31	15.5%
	25-35	69	34.5%
	36-45	57	28.5%
	46 and above	43	21.5%
<b>Income</b>	Below 1.5 lakh	52	26%
	1.5 lakh -3.5 lakh	76	38%
	3.5 lakh -5.5 lakh	44	22%
	Above 5.5 lakh	28	14%



**Figure 1:** Graphical depiction of the respondents' demographic characteristic percentage

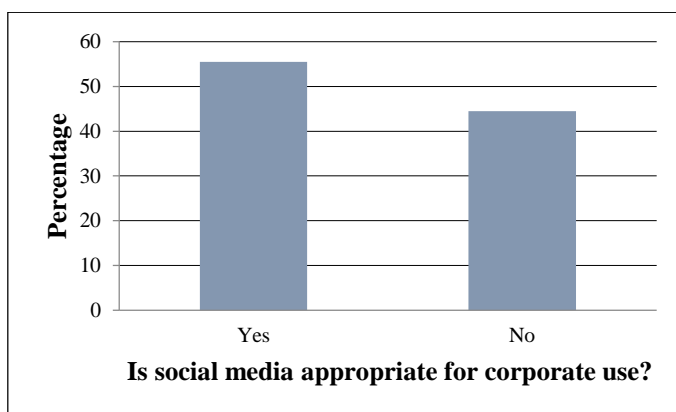
Table 1 presents a thorough summary of the study's participant profile and offers insightful information about the respondents' age, gender, and income bracket distribution. With 53.5% of respondents being male and 46.5% being female, the gender distribution shows a well-balanced representation, representing a diversified sample. The age distribution of the respondents shows that most are between the ages of 25 and 35 (34.5%), 36 to 45 (28.5%), and under 25 (15.5%). Individuals who are 46 years of age or older make up 21.5% of the sample, with a diverse representation across several age groups. In terms of income distribution, the information displays a wide range of economic conditions. Notably, the highest income band is the 1.5 lakh - 3.5 lakh range, with 38% of the respondents, followed by those earning less 1.5 lakh (26%), 3.5 lakh - 5.5 lakh (22%), and above 5.5 lakh (14%). In order to contextualise and interpret the study's findings within the diverse demographic landscape of the surveyed stores in Kochi, Kerala, researchers and practitioners can benefit from this demographic breakdown, which offers a comprehensive perspective of the participant composition.

### Survey on Social Media Usage: Kochi Retailers

Retailers in Kochi, Kerala who use social media for their company participated in the survey. This section presents data that was gathered from 200 respondents utilising a scheduled interview schedule.

**Table 2:** Social media is being used by retailers for their company.

Is social media appropriate for corporate use?	Number of respondents	Percentage
Yes	111	55.5
No	89	44.5
Total	200	100

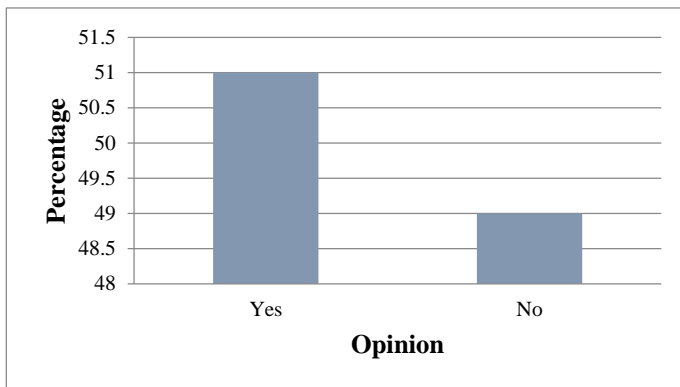


**Figure 2:** Graphical depiction of the percentage of views about retailers' use of social media for retail

Table 2 highlights the widespread adoption of social media in the retail sector by showing that 55.5% of retailers in the research actively use it for their company. On the other hand, 44.5% said they didn't use social media for business-related purposes. This demonstrates how important social media is to the plans of most of the businesses polled, which encourages more research into the particular tactics and their possible effects on financial results.

**Table 3:** Do you feel at ease running your company without social media?

Opinion	Number of respondents	Percentage
Yes	102	51
No	98	49
Total	200	100

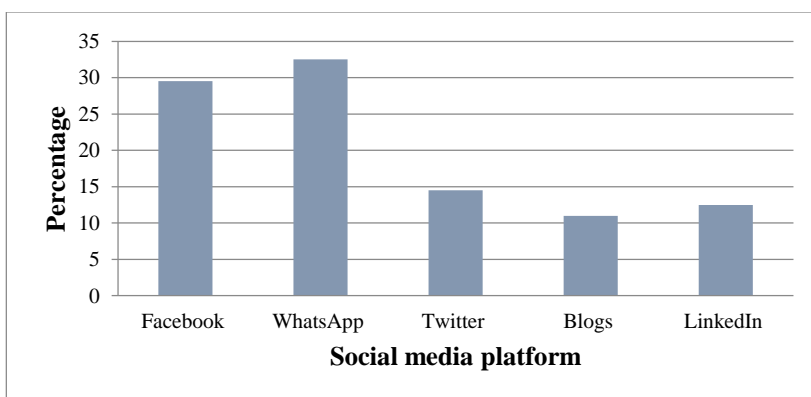


**Figure 3:** Graphical depiction of the percentage of respondents that say they feel comfortable running their business without using social media.

Table 3 presents a fair viewpoint from retailers: 51% say they are comfortable running their company without social media, while 49% disagree. This suggests that different people have different perspectives about how important social media is to their company plans, which calls for more research into the variables driving these viewpoints and how they could affect business outcomes.

**Table 4:** Which social media sites have you used from the list below?

Social media platform	Number of respondents	Percentage
Facebook	59	29.5
WhatsApp	65	32.5
Twitter	29	14.5
Blogs	22	11
LinkedIn	25	12.5
Total	200	100

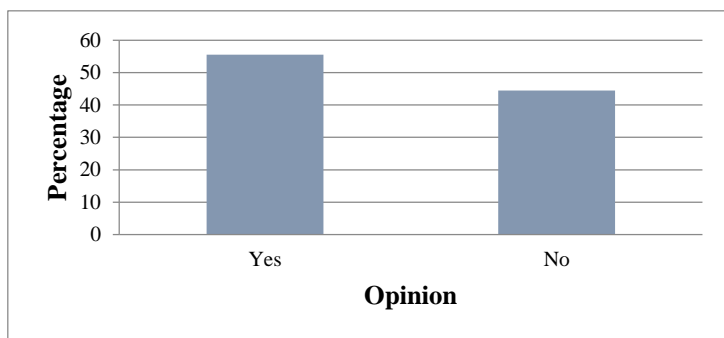


**Figure 4:** A visual depiction of the percentage of opinions regarding the social media network that you have utilised.

Table 4 displays the various social media platforms that shops choose. At 32.5%, WhatsApp is the most popular, followed by Facebook at 29.5%. The information highlights the various tactics used by shops, demonstrating the significance of a multi-channel strategy in their social media campaigns by utilising platforms such as Twitter, Blogs, and LinkedIn to varying degrees.

**Table 5:** Do you use social media to interact with customers?

Opinion	Number of respondents	Percentage
Yes	111	55.5
No	89	44.5
Total	200	100

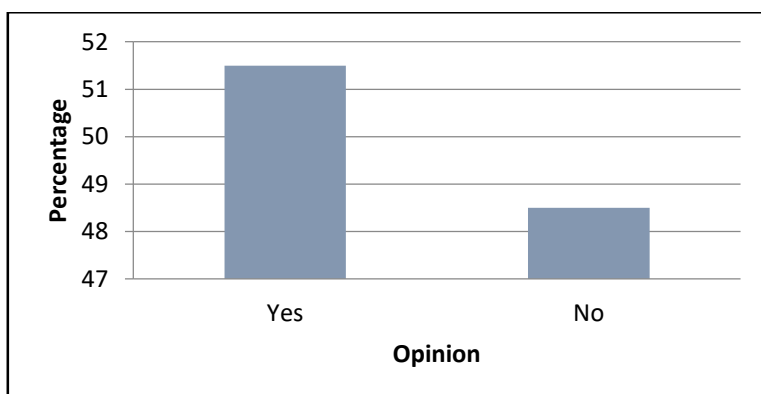


**Figure 5:** A visual depiction of the percentage of respondents' opinions regarding the use of social media for customer relations

Table 5 highlights the significant significance that social media plays in building relationships with customers by showing that 55.5% of retailers use it for customer interactions. This emphasises how important social media is as a tool for improving consumer interaction in the retail industry.

**Table 6:** Do you interact with suppliers and other agencies through social media?

Opinion	Number of respondents	Percentage
Yes	103	51.5
No	97	48.5
Total	200	100

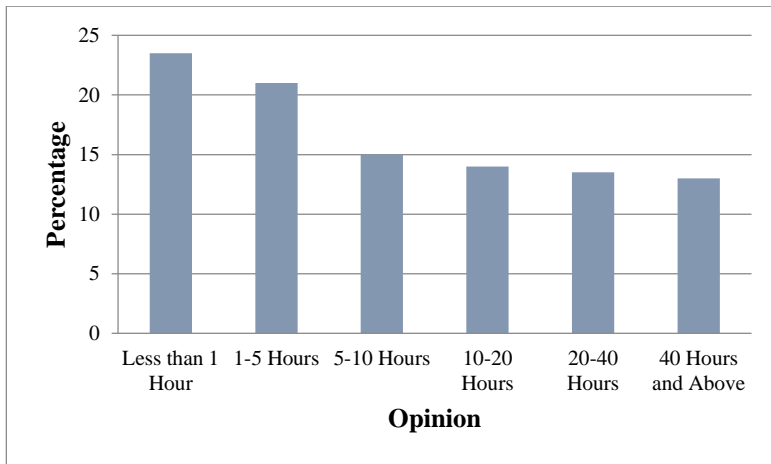


**Figure 6:** Graphical depiction of proportion of thoughts concerning Are you using social media in communicating with suppliers and other agencies?

Table 6 shows that merchants use social media in a balanced way, with 51.5% using it to communicate with other agencies and suppliers. This demonstrates social media's dual function as a tool for customers and a way for shops to interact with other parties. The results call for more investigation into the particular tactics and ramifications of utilising social media in these corporate partnerships.

**Table 7:**What is the average weekly time spent on business-related social media platforms?

Opinion	No. of Respondents	Percentage
Less than 1 Hour	47	23.5
1-5 Hours	42	21
5-10 Hours	30	15
10-20 Hours	28	14
20-40 Hours	27	13.5
40 Hours and Above	26	13
Total	200	100



**Figure 7:** Graphical depiction of the percentage of views regarding the average amount of time spent each week on social media for business matters?

The varied amounts of time that merchants devote to social media for business matters are seen in Table 7. Remarkably, 34.5% of people work 1–5 hours per week; the figures gradually decline over longer time periods. This indicates that merchants' levels of engagement are variable but moderate, highlighting the necessity of taking a strategic approach when integrating social media into their business operations.

**Pearson Correlation**

**Table 8:**A Correlation Matrix

		Success of retail business	Consumer behaviour and brand perception in the retail sector	Social Media
<b>Success of retail business</b>	Pearson Correlation	1	.621**	.441**
	Sig. (2-tailed)		0	0
	N	200	200	200
<b>Consumer behaviour and brand perception in the retail sector</b>	Pearson Correlation	.621**	1	.586**
	Sig. (2-tailed)	0		0
	N	200	200	200
<b>Social Media</b>	Pearson Correlation	.441**	.586**	1
	Sig. (2-tailed)	0	0	
	N	200	200	200

As evidenced by the correlation coefficient of 0.441 in table 8, there is a considerable connection between success of retail business and social media. The significance of this link is indicated by the P-an incentive for this connection coefficient, which is.005. The retail industry's social media usage, consumer behavior, and brand impression have a 0.586 connection coefficient, indicating a modest relationship.

## Regression Analysis

**Table 9:** Model summary of variables

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.773 <sup>a</sup>	.597	.589	.90069
a. Predictors: (Constant), Social Media				

**Table 10:** ANOVA summary

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	234.071	2	58.518	72.165	.000 <sup>b</sup>
	Residual	158.124	197	.811		
	Total	392.195	199			
a. Dependent Variable: Consumer behaviour and brand perception in the retail sector, Success of retail businesses						
b. Predictors: (Constant), Social Media						

**Table 11:** Coefficient of Determination of the Variable

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.761	.307	-.623	-7.501	.017
	Social Media	.698	.087	.529	6.952	.003
a. Dependent Variable: Consumer behaviour and brand perception in the retail sector, Success of retail businesses						

The purpose of the relapse inquiry was to determine what free factors meant for a dependent variable. In this study, there was one independent variable and two dependent variables. Relapse analysis also uses the R square value to demonstrate the model's appropriateness. One method for testing hypotheses is relapse investigation, which ascertains the degree to which an independent variable influences a dependent variable. Table 11 presents data from a relapse analysis that looked at the influence of social media on a dependent variable. The stable term has a pessimistic coefficient at the point when social media usage is at its lowest, indicating a significant negative impact on the dependent variable. With p-upside of 0.003, social media have positively normalised coefficients (Beta upsides) of 0.529, making this development truly critical. This demonstrates the substantial relationship between social media and consumer behaviour and brand perception, and success of retail businesses.

## Discussion

The social media usage survey conducted among retailers in Kochi, Kerala, offers a nuanced view of the tactics and acceptance of social media by companies operating in the retail industry. Table 2 highlights the extensive integration of social media in the industry, with 55.5% of respondents indicating that they actively use it for company operations. On the other hand, Table 3 presents a balanced viewpoint, as 51% of respondents said they feel comfortable avoiding social media, suggesting a range of opinions regarding its importance. Table 4 presents a range of social media platform preferences, with the majority being WhatsApp at 32.5%. This highlights the necessity for retailers' plans to adopt a multi-channel approach. Additionally, Table 5 shows that 55.5% of users utilise social media for customer interactions, highlighting the critical function that social media plays in building relationships. Table 6 demonstrates social media's dual use by showing a balanced utilisation (51.5%) for interactions with suppliers and other agencies. Lastly, Table 7 shows a varied time commitment: 34.5% of respondents report spending 1–5 hours per week, indicating a modest but varied degree of participation. Together, these results highlight social media's complex function in the retail industry and call for more research into certain behaviours and their possible effects on financial results.

The factors examined in this study have significant correlations, as shown by the Pearson correlation analysis, which is shown in Table 8. The study reveals a significant positive correlation of 0.621 ( $p < 0.001$ ) between the variables "Success of retail business" and "Consumer behaviour and brand perception in the retail sector." The significance of this link is highlighted by the statistically significant P-value (0.005), which shows that positive consumer behaviour and brand perception increase in tandem with retail businesses' performance. Furthermore, the analysis shows a moderately significant but large correlation between "Social Media" and "Consumer behaviour and brand perception in the retail sector," with a significant correlation of 0.586 ( $p < 0.001$ ). These results highlight the interdependence of these factors and highlight the critical role that social media plays in influencing consumer sentiments and retail firms' overall success. The investigation reveals strong correlations that provide useful insights into the complex relationships between social media, customer behaviour, brand perception, and merchants' overall success in the modern retail environment.

The study's regression analysis, detailed in Table 9, reveals a robust relationship between the independent variable, "Social Media," and the dependent variables, "Success of retail businesses" and "Consumer behaviour and brand perception in the retail sector." The inclusion of the "Social Media" predictor may account for almost 59.7% of the variation in the dependent variables, according to the model summary, which shows a significant R-square value of 0.597. With a statistically significant F-value of 72.165 ( $p < 0.001$ ), the ANOVA summary in Table 10 highlights the regression model's resilience and highlights its ability to provide a dependable fit for the data. Table 11's coefficient of determination corroborates these results, showing that the predictor variable "Social Media" has a standardised coefficient of 0.529, indicating a moderately strong and positive influence on retail businesses' success as well as consumer behaviour and brand perception. These findings highlight the empirical connection between retailers' use of social media and the observed differences in customer behaviour, brand perception, and overall retail industry success.

**Table 12:** Main findings of hypothesis testing

Hypothesis	Findings
<b>H0A:</b> Social media has no appreciable impact on consumer choices and brand perception in the retail industry.	Rejected
<b>H1A:</b> In the retail industry, social media has a significant impact on consumer behaviour and brand perception.	Accepted
<b>H0B:</b> The success of retail businesses is not significantly impacted by social media.	Rejected
<b>H1B:</b> Social media has a big impact on retail businesses' ability to achieve success.	Accepted

The alternative hypothesis (H1A) was supported by the findings of the hypothesis test, which asserts that social media significantly influences these aspects, is accepted, while the null hypothesis (H0A), which suggests social media has no significant influence on consumer behaviour and brand perception in the retail sector, is rejected. Similarly, the alternative hypothesis (H1B), which suggests that social media has a large impact on retail firms' success, is accepted, while the null hypothesis (H0B), which suggests that social media has no major impact on retail businesses' success, is rejected. These findings point to a statistically significant correlation between social media use and consumer behaviour, brand perception, and retail firms' overall success in the setting under study.

## Conclusion

Internet use is now considered a need rather than a luxury in all spheres of life. Social media use in retail is a practical and less expensive substitute for traditional brick and mortar businesses. Our survey's retailers are likewise aware of this. The rise in popularity of social media has brought about changes in the retail industry. The retail industry's adoption and methods of social media vary widely, according to a survey conducted among shops in Kochi, Kerala. Although 55.5 percent of them actively incorporate social media into their business operations, 51% of them seem content enough to operate without it, indicating a balanced viewpoint. A multi-channel strategy is crucial given the disparate preferences among social media sites, with WhatsApp leading the pack at 32.5%. The 55.5% of people who use social media for customer relations purposes highlight how important these platforms are. Furthermore, social media fulfils a second purpose: 51.5% of users use it to communicate with vendors and other organisations. The variable time commitment—34.5% of participants devote one to five hours each week—indicates a somewhat high degree of engagement. Further highlighting the connections between social media, consumer behaviour, brand impression, and overall success in the retail sector are the Pearson correlation and regression studies. Together, these results demonstrate the complex influence of social media on the dynamics of Kochi's merchants and call for more research into certain behaviours and the possible effects they may have on financial results in the changing retail environment.

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# Short Term Impact of Acquisition on Stock Returns- A Study Based on BSE Listed Select Companies in India

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## Abstract

In this research paper, an event study approach has been used to investigate the impact of the acquisition of shares on the returns of acquirer companies that are listed in the Bombay Stock Exchange database. For that purpose, 14 acquirer companies have been selected from Prowess IQ database. This study aims to find whether any significant impact is there or not after the acquisition on the acquirer companies with the help of event study methodology. The results of t test showed that abnormal returns (AR) of the acquirer companies are statistically significant just after the event date. Cumulative average abnormal returns(CAAR) of acquirer companies were also increasing very quickly after the acquisition of shares. After that, cumulative average abnormal returns were fluctuating and tend to move normally throughout the event window. Findings of the study revealed that acquisition of shares have a short-term impact on the returns of acquirer companies.

**Keywords:** *abnormal return, acquisition, event study, market model, sensex.*

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## Introduction

From the history, it is seen that different event like World war-II, Russia-Ukraine war, covid-19, the Ebola virus, etc. have a tremendous impact not only on society but also on our economy. Volatility of stock market has also increased during that time period due to panic among investors. The share prices of the companies showed a fluctuating trend when major events happened in the national and international market. The impact of international issues is much wider than the impact of national issues. International issues have an impact on the economy of different countries of all over the world for a long period of time but impact of national issues is limited to economy of the specific country. The impact of a particular event and its continuity period depend on the nature of the event. For instance, World war-II had a larger and longer time-period impact on the whole of the world. Similarly, corporate events like acquisition, merger, bonus issue, declaration of dividend have also an impact on the share prices of different companies. Basically, acquisition is a way for those companies whose target is to expand their operations and gain market share. It is expected that performance of acquirer companies would be influenced by acquisition event. It is also observed that mergers and acquisitions did not improve the performance of companies in case of cross -border mergers and acquisitions as compared to domestic mergers and acquisitions Liu et al., (2021).

Long-term impacts of any events have been measured through different parametric and non-parametric tests like the paired t-test, Wilcoxon signed rank test, Data envelopment analysis, etc., but short-term impact can be measured through the event study methodology. Mall and Gupta, (2019) used event study methodology for their study and they found no such abnormality in abnormal return due to merger event. In another study Rani et al., (2015) have noticed positive abnormal return before the event date and negative abnormal return after the event date. But our study focuses on the within-country or domestic acquisitions only. In this context, main objectives of the study to find out the short-term impact of the acquisition event on the return of acquirer companies that are listed in the BSE. The findings of the study may help researchers and the practitioners in their decision making.

## Review of Literature

A large number of studies have been conducted related to this topic within India and outside India. They have judged the short term and long-term impact of merger and acquisition on company performances.

To compare the impact of cross-border merger and domestic merger, Liu et al., (2021) have selected 86 cross-border merger and 81 domestic merger cases that have taken place within 2007 to 2012. For that purpose, they

have considered 5 years before and 5 years after dataset and also used least square regression method for analysis purpose for the selected companies. Findings of their study revealed that domestic merger performs better than cross border mergers in the aspect of financial performance.

By using the event study methodology Pandey & Kumari (2020) examined the performance of 14 Indian and American banks (the acquiring firm) by taking the dataset from 2010 to 2019. According to the study's findings, Indian banks' share prices are more sensitive than American banks' share prices. The CAAR of the U.S. banks has been changed after the event date, whereas the remarkable changes have been noticed in the CAAR of the Indian bank throughout the event window.

Impact of merger and acquisition on firms' performance in different time period has measured by Aggarwal & Garg (2019) by taking data of 68 public limited non-banking firms. They conducted stagewise analysis along with paired t-test on 5 years dataset and it was found that acquirer service sector firms performed better than manufacturing sector firms in India and the analysis also showed that merger and acquisition has impacted profitability and liquidity of non-banking firms rather than solvency of the non-banking firms.

Chavda & Raval (2019) has compared the impact of horizontal, vertical and conglomerate merger by using ratio analysis or proportion analysis and it was found that some ratios did not improve firms' performance.

Mall and Gupta (2019) had analysed the impact of merger and acquisition on 428 Indian companies (other than the financial and agricultural sector) using event study methodology. The findings of the study showed that stock return abnormality was not caused by merger and acquisition and they concluded that shareholders did not receive abnormal return due to merger events.

Impact of merger and acquisition on Indian pharmaceutical sector was analysed by Kanimozhi & Pavathaarni (2019) by taking the data of 6 years (3 years pre-merger and 3 years post-merger). For the analysis purpose they have used ratio analysis and it was found that positive impact has been reflected on some selected indicators of the companies.

Impact of mergers and acquisitions on profitability was measured by Mishra (2019) in post liberalization period by using GMM method and they have considered different aspects such as market structure, inter industry variation, foreign technology purchase, market and distribution etc. and the findings of the study revealed that neither market structure nor merger improved the financial performance of the firm but capital intensity, distribution related efforts and information technology advancement influenced the financial performance either positively or negatively.

In their study, Chen et al., (2018) showed that acquisition result was more fruitful in terms of synergies, goodwill when target firms' have shown more positive result in their financial statement at the time of acquisition.

Alhenawi & Stilwell (2017) have shown value creation due to merger not only dependent on target firms' pre-acquisition value but also on dependent on acquirer firms' competencies and financial result. The findings of the study also revealed that successful mergers and acquisitions are statistically significant with internal capital market theory but not with agency theory.

Bi, Z (2016) compared the pre-merger and post-merger performance in terms of liquidity, profitability and solvency by taking select companies from IT sector. The author has analysed the impact of merger on different financial aspects in case of domestic and cross border mergers using descriptive statistics and paired t-test. The findings of the study revealed that no significant change have been noticed after merger in both cases.

For studying the impact on mergers and acquisitions on value, Wu et al., (2016) analysed 180 mergers and acquisitions cases that have taken place between 2002 and 2012 in China using event study methodology. The findings of the study revealed that merger and acquisition activities have significant positive impact during event window (+10, -10) and they identified many other factors such as research and development, mergers and acquisitions experiences that have played vital positive role in value creation.

Rani et al., (2015) investigated long-term performance of the acquiring firm using ratio analysis. In their analysis du-pont analysis have been used for identifying the sources of better long-term post-merger acquisition return. They conducted a comprehensive ratio analysis of 14 major ratio related to profitability, efficiency,

liquidity and leverage on a sample of 305 merger and acquisition. The result showed that there is an improvement in the performance of the acquiring firms in post-merger acquisition period.

Lai et al., (2015) have compared the pre-merger and post-merger performance of banking industry of Malaysia after the year 2000 by using different statistical tools such as DEA, t-statistics and paired sample t-test and they have noticed no such significant improvement in the performance and efficiency of the merged bank after merger and acquisition.

Tripathi & Lamba (2015) have analysed the financial performance of 269 Indian companies that underwent cross-border merger and acquisition during 1998 to 2009 considering industry specific factors, time of acquisition, status of the development of the target economy. They conclude that companies should diversify their portfolio of international exposure and focus of the cross-border merger and acquisition should be given on the location of the target company and time of the deal.

Laabs&Schiereck (2010) investigated short and long-term effects of merger and acquisition on 230 Indian acquiring companies. In their study, they applied event study methodology and Fama French 3 factor model for examining the wealth effect of horizontal merger and acquisition in the automotive supply industry. From the event study it has been noticed a significant positive improvement in returns of the acquiring companies. The finding of the Fama French 3 factor model revealed 20% value deterioration of the select companies over 3 years.

Zhu & Malhotra (2008) examined the short-term stock performance of 74 Indian companies that acquired US firms during the period 1999 to 2005 using event study methodology. Analysis of the several event windows found that the Indian acquiring firms returns have increased for 2 or 3 days after the merger and acquisition event and after that returns become negative.

### **Importance of This Study**

Majority of the studies have been analysed the long-term impact of merger and acquisition on company performance but this study is conducted to analyse the short-term impact of acquisition of shares on stock return.

The relevance of the study are as follows:

Firstly, the findings of the study may add some knowledge in the domain of knowledge of literature related to merger and acquisition.

Secondly, this study can give investors an overview of the situation that arises before and after the acquisition or related event, its impact and the duration of the impact. It may guide investors in the short-term decision making.

Thirdly, practitioners can manage their portfolio accordingly in those specific stocks during that time period of abnormality and suggest them whether to invest or to divest in those stocks.

Lastly, regulators like RBI, SEBI, IRDA may take different policy measures based on the impact of the specific event.

### **Objectives of the Study**

The main objectives of the study are:

- To evaluate the short-term impact of the acquisition on stock return and
- To test whether there is any significant difference in the returns during pre-acquisition and post-acquisition period or not?

### **Research Hypothesis**

In this study, we test the following hypothesis:

Null Hypothesis 1 ( $H_{01}$ ): Average abnormal returns surrounding the event date are close to zero.

Alternative Hypothesis 1 ( $H_{11}$ ): Average abnormal returns surrounding the event date are different to zero.

Null Hypothesis 2 (H<sub>02</sub>): There is no significant difference in the average abnormal returns before and after the acquisition period on the listed companies.

Alternative Hypothesis 2 (H<sub>12</sub>): There is significant difference in the average abnormal returns before and after the acquisition period on the listed companies.

## Research Methodology

### Research Techniques

To investigate the impact of acquisitions on the BSE listed 14 companies, event study methodology has been used. For that purpose, returns of 14 companies and S&P BSE SENSEX return have been calculated using the following formulas;

Return of the  $i^{\text{th}}$  security ( $R_i$ ) =  $L_n (P_{it}/P_{it-1})$

Where,  $P_{it}$  = closing share price of  $i^{\text{th}}$  stock at  $t^{\text{th}}$  day and

Return on market index ( $R_m$ )

=  $L_n (P_{mt}/P_{mt-1})$ .

where,  $P_{mt}$  = closing share price of market index at  $t^{\text{th}}$  day

Here, daily share price data has been selected because it is not possible to measure the immediate effect of the acquisition event on the basis of weekly or monthly data. In the event study methodology, it is investigated that whether abnormal returns on those companies' stock were noteworthy or not during the pre and post-acquisition date or event date. Here, the event date is the date of the announcement of the acquisition by the companies. The occurrence of an acquisition event is expected to have a positive or negative impact on abnormal or excess return. Here, "abnormal or excess return" is the difference between the actual and expected return.

Here, abnormal return = Actual rate of return of  $i^{\text{th}}$  stock - Expected rate of return of  $i^{\text{th}}$  stock

$AR_i = R_i - E(R_i)$

Expected return of  $i^{\text{th}}$  stock ( $E(R_i)$ )

$$= \alpha_i + \beta_i R_m \quad \dots(1)$$

Where,  $i=1,2,\dots,14$

After computing the abnormal return (AR) of each stock, the average abnormal return was calculated. The Average Abnormal Return (AAR) is calculated by averaging estimated abnormal returns across securities or stocks.

Average Abnormal Return Of the  $i^{\text{th}}$  stock (AAR).

$$= \sum_i^n \frac{AR_i}{n} \quad \dots(2)$$

Where  $n=14$

If the acquisition announcement date affects the share price, it is believed that abnormal returns around the acquisition date will be significantly different from zero.

Since, the acquisition does not create an impact rapidly in the average abnormal return, the cumulative average abnormal returns are to be computed for examining the impact of acquisition during pre-acquisition and post-acquisition period.

Cumulative Average Abnormal Return (CAAR) for the period

$$(T_o, T_t) = \sum_{T_o}^{T_t} AR_i \dots(3)$$

If the market is efficient, then it can be assumed that the value of ARR should be zero.

For testing the significance of Average Abnormal Return (ARR), t-test is used.

### Sources of Data

Initially, 25 acquirer companies, that acquire shares from January 1, 2023 identified to June 30, 2023, have been identified from the CMIE Database. Out of 25 companies, 14 companies have been selected on the basis of availability of the share price data. The daily closing share prices of 14 companies and the S&P BSE SENSEX have been collected for 211 days before the event date and 30 days after the event date from [www.bseindia.com](http://www.bseindia.com) database.

### Results, Discussions & Findings

Table 1 represents estimated alpha and beta coefficients, which are estimated based on the return of 180 days of select stocks and return of S&P BSE SENSEX with the help of equation no. (1). These coefficients are used to estimate the expected return and abnormal returns of 14 companies for sixty- one days (thirty days prior to the acquisition date, thirty days post from acquisition date, and the event date itself).

The names of the acquirer companies and their beta and alpha estimator are given in Table 1.

**Table 1: List of Acquirer Companies Listed in BSE**

Srl.No.	Name of acquirer companies	Estimated beta	Estimated alpha
1	Allcargo Logistics Ltd.	1.09458	0.127422
2	Gensol Engineering Ltd.	0.531986	0.689378
3	Greaves Cotton Ltd.	1.630817	-0.20577
4	Happiest Minds Technologies Ltd.	0.945164	-0.14098
5	Housing Development Finance Corpn. Ltd.	1.313804	0.024722
6	India Grid Trust	0.26636	-0.03673
7	J K Cement Ltd.	0.959491	0.081852
8	Kotak Mahindra Bank Ltd.	0.857122	0.007334
9	Mahanagar Gas Ltd.	0.819745	0.056523
10	S J S Enterprises Ltd.	0.807577	-0.08554
11	SamvardhanaMotherson Intl. Ltd.	1.187857	-0.14313
12	Sun Pharmaceutical Inds. Ltd.	0.60505	0.041354
13	Uno Minda Ltd.	0.678456	0.049711
14	Vedanta Ltd.	1.238197	0.004183

Source: Data collected and compiled by the researchers

Table 2 indicates the average abnormal return and cumulative average abnormal return computed using equation no. (2) and equation no. (3) for 61 days. It also showed the average abnormal return, cumulative average abnormal return along with the t statistics and the level of significance. From the following table, it has been revealed that t statistics for average abnormal return were not significant before the event date but the average abnormal returns were significant at the event date and just following the event date at 5% level. So, it can be concluded that null hypothesis is rejected which indicates that average abnormal return after the event date is different from zero. It showed the presence of abnormality in the market after the acquisition. Although, average abnormal returns on the t+20, t+28 days were significant at the 5% level, it may be due to any other reason. Cumulative average abnormal returns were showing negative values just before the acquisition date but after the event date or acquisition date, cumulative average abnormal returns were increasing up to t+4 days (it is shown in the Figure 1). It also depicted that there was a short-term impact of acquisition on stock return.

**Table 2: Daily Average abnormal Returns (ARR) and Cumulative Average Abnormal Returns (CAAR) for Pre 30 days and Post 30 days of the Acquisition event of BSE Listed 14 Companies**

Day t	Average Abnormal Return	t-statistics	Level of significance	Null Hypothesis test status	Cumulative Average Abnormal Return (CAAR)
-30	-0.16628	-0.47605	0.641943	Accept Null Hypothesis $H_{01}$	-0.16628
-29	-0.01564	-0.03462	0.972906	Accept Null Hypothesis $H_{01}$	-0.18192
-28	0.011777	0.037927	0.970322	Accept Null Hypothesis $H_{01}$	-0.17014
-27	-0.18061	-0.72793	0.479565	Accept Null Hypothesis $H_{01}$	-0.35075
-26	-0.2094	-0.66725	0.516285	Accept Null Hypothesis $H_{01}$	-0.56015
-25	0.047659	0.216835	0.831703	Accept Null Hypothesis $H_{01}$	-0.51249
-24	0.409542	0.90011	0.384433	Accept Null Hypothesis $H_{01}$	-0.10295
-23	0.201172	0.297922	0.770471	Accept Null Hypothesis $H_{01}$	0.098225
-22	0.335372	1.085923	0.29724	Accept Null Hypothesis $H_{01}$	0.433597
-21	-0.06093	-0.14486	0.887042	Accept Null Hypothesis $H_{01}$	0.372669
-20	0.142379	0.222046	0.827728	Accept Null Hypothesis $H_{01}$	0.515047
-19	-0.11369	-0.21157	0.835719	Accept Null Hypothesis $H_{01}$	0.401358
-18	-0.6143	-1.46169	0.167576	Accept Null Hypothesis $H_{01}$	-0.21294
-17	0.637978	1.677499	0.11731	Accept Null Hypothesis $H_{01}$	0.425033
-16	0.056079	0.176857	0.862346	Accept Null Hypothesis $H_{01}$	0.481112
-15	-0.02161	-0.07465	0.94163	Accept Null Hypothesis $H_{01}$	0.459506
-14	-0.96649	-1.18003	0.259133	Accept Null Hypothesis $H_{01}$	-0.50699
-13	-0.14899	-0.33857	0.740339	Accept Null Hypothesis $H_{01}$	-0.65597
-12	-0.42138	-0.82516	0.424166	Accept Null Hypothesis $H_{01}$	-1.07736
-11	0.056872	0.16743	0.869608	Accept Null Hypothesis $H_{01}$	-1.02048
-10	-0.09733	-0.16027	0.875135	Accept Null Hypothesis $H_{01}$	-1.11782
-9	0.224567	0.547114	0.593569	Accept Null Hypothesis $H_{01}$	-0.89325
-8	-0.10303	-0.35781	0.726229	Accept Null Hypothesis $H_{01}$	-0.99628
-7	0.292419	0.548653	0.592542	Accept Null Hypothesis $H_{01}$	-0.70386
-6	-0.45484	-1.66842	0.119125	Accept Null Hypothesis $H_{01}$	-1.15871
-5	0.217183	0.66316	0.518815	Accept Null Hypothesis $H_{01}$	-0.94152

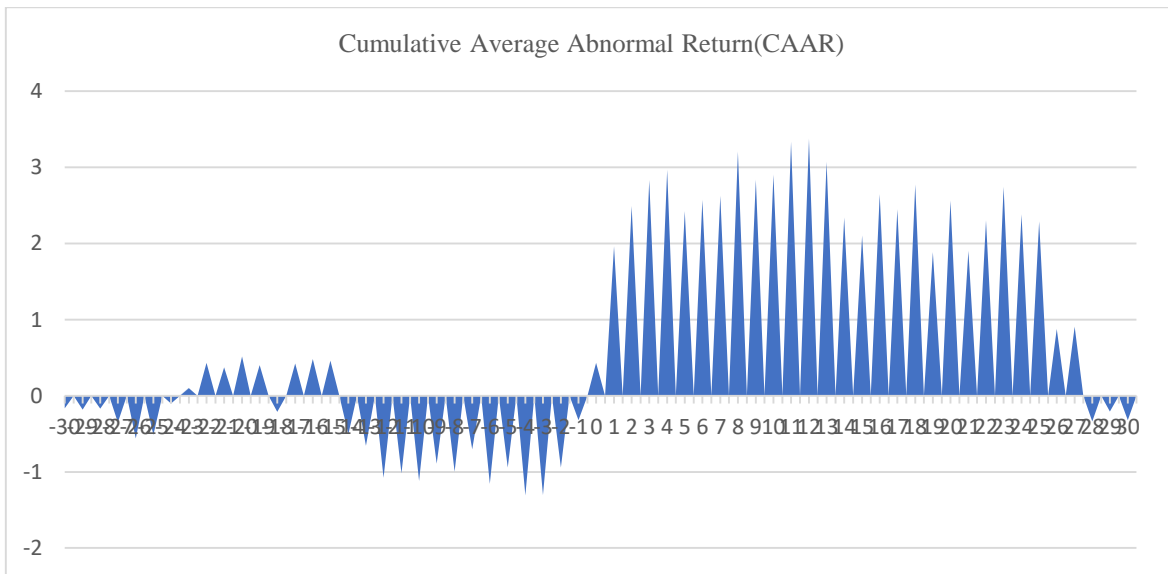
Day t	Average Abnormal Return	t-statistics	Level of significance	Null Hypothesis test status	Cumulative Average Abnormal Return (CAAR)
-4	-0.36809	-0.80479	0.435414	Accept Null Hypothesis H <sub>01</sub>	-1.30962
-3	0.005362	0.007471	0.994152	Accept Null Hypothesis H <sub>01</sub>	-1.30425
-2	0.361778	0.847778	0.411899	Accept Null Hypothesis H <sub>01</sub>	-0.94248
-1	0.622317	1.14669	0.272178	Accept Null Hypothesis H <sub>01</sub>	-0.32016
0	0.750844	2.162653	0.049792**	Reject Null Hypothesis H <sub>01</sub>	0.430686
1	1.532593	2.189697	0.047385**	Reject Null Hypothesis H <sub>01</sub>	1.963279
2	0.530139	1.101769	0.290543	Accept Null Hypothesis H <sub>01</sub>	2.493418
3	0.337118	0.616069	0.548485	Accept Null Hypothesis H <sub>01</sub>	2.830536
4	0.135489	0.511701	0.617441	Accept Null Hypothesis H <sub>01</sub>	2.966025
5	-0.54112	-1.36817	0.194443	Accept Null Hypothesis H <sub>01</sub>	2.4249
6	0.145246	0.363245	0.72226	Accept Null Hypothesis H <sub>01</sub>	2.570146
7	0.055394	0.108278	0.915429	Accept Null Hypothesis H <sub>01</sub>	2.62554
8	0.583354	1.422061	0.178556	Accept Null Hypothesis H <sub>01</sub>	3.208894
9	-0.3734	-1.0931	0.294191	Accept Null Hypothesis H <sub>01</sub>	2.835496
10	0.069507	0.22256	0.827336	Accept Null Hypothesis H <sub>01</sub>	2.905003
11	0.430778	1.067917	0.304988	Accept Null Hypothesis H <sub>01</sub>	3.335781
12	0.037565	0.08306	0.935069	Accept Null Hypothesis H <sub>01</sub>	3.373347
13	-0.30006	-1.20556	0.249474	Accept Null Hypothesis H <sub>01</sub>	3.073286
14	-0.73415	-1.78751	0.097177	Accept Null Hypothesis H <sub>01</sub>	2.339133
15	-0.23392	-0.43695	0.669321	Accept Null Hypothesis H <sub>01</sub>	2.10521
16	0.544041	1.473949	0.164295	Accept Null Hypothesis H <sub>01</sub>	2.649251
17	-0.20028	-0.31273	0.759443	Accept Null Hypothesis H <sub>01</sub>	2.448972
18	0.322801	1.186857	0.25652	Accept Null Hypothesis H <sub>01</sub>	2.771773
19	-0.88369	-1.76086	0.101751	Accept Null Hypothesis H <sub>01</sub>	1.88808
20	0.676592	2.115661	0.054247**	Reject Null Hypothesis H <sub>01</sub>	2.564672
21	-0.65967	-1.47921	0.162903	Accept Null Hypothesis H <sub>01</sub>	1.905003
22	0.396802	1.073622	0.302517	Accept Null Hypothesis H <sub>01</sub>	2.301805
23	0.440835	0.43491	0.67076	Accept Null Hypothesis H <sub>01</sub>	2.74264

Day t	Average Abnormal Return	t-statistics	Level of significance	Null Hypothesis test status	Cumulative Average Abnormal Return (CAAR)
24	-0.36016	-0.73422	0.475851	Accept Null Hypothesis $H_{01}$	2.382482
25	-0.09383	-0.19882	0.845482	Accept Null Hypothesis $H_{01}$	2.28865
26	-1.4093	-1.03162	0.321062	Accept Null Hypothesis $H_{01}$	0.879346
27	0.02835	0.090487	0.929279	Accept Null Hypothesis $H_{01}$	0.907695
28	-1.24526	-2.58988	0.022432**	Reject Null Hypothesis $H_{01}$	-0.33756
29	0.129431	0.262788	0.796833	Accept Null Hypothesis $H_{01}$	-0.20813
30	-0.11364	0.43111	0.672222	Accept Null Hypothesis $H_{01}$	-0.32177

Source: Data collected and compiled by the researchers

\*\*Significant at 5% Level of significance.

**Figure 1: Cumulative average abnormal return**



Source: Data collected and chart prepared by the researchers

Table 3 depicts the average abnormal return before and after the acquisition period. The average abnormal return in the pre-period is -0.010671952 with an insignificant t value of -.169 and in the post-period is -0.025081883 with an insignificant t value of -.227. Null hypothesis in both periods are accepted, which indicates that there is no significant difference in the average abnormal returns before and after the acquisition period on the listed companies, which indicates that on average no such abnormality is viewed in all the days of the acquisition event.



**Table 3: Average Abnormal Return before and after acquisition Period**

Event	Average Abnormal Return	T- statistics	Significance level	Null Hypothesis test
Before the acquisition period	-0.010671952	-.169	.867	Accept null hypothesis H <sub>0</sub>
After the acquisition period	-0.025081883	-.227	.822	Accept null hypothesis H <sub>0</sub>

Source: Data collected and prepared by the researchers

### Conclusions

In this paper, it has been observed that few abnormalities have been seen surrounding the acquisition date, Table 3 showed that there was a very minor movement in the average abnormal returns surrounding the event date. Abnormal returns have been increased just after the event date and cumulative average abnormal returns were showing negative values just before of the event day but after the event date, cumulative average abnormal returns were increasing up to t+4 days. It indicated that there was a short-term impact of acquisition on stock returns. It implies that share prices of stocks showed a fluctuating trend when acquisition of shares of one company by another company took place. The findings of the study may provide an insight to present and potential investors in their short-term decision making.

### Limitations of the Study

The main limitation of the study is that it has been conducted by taking a small sample of 14 companies from the BSE database (Indian stock market) for a particular calendar year, 2023 from 1<sup>st</sup> January up to 30<sup>th</sup> June. Secondly, stock return affected by so many factors but different factors were not taken into consideration in this study. In addition, it is very difficult to segregate the impact of acquisition on Stock return separately.

### Scope for Further Research

In this study few companies' data were taken. Consideration of more companies over several years would be much more appealing and informative. Several uncontrollable factors were not considered over here. In future addition of more companies over a prolonged time period in different database or stock market like NSE would have been a great opportunity to view varied results.

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### **Conclusion**

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South Asian Journal of Management Research (SAJMR), ISSN : ISSN-0974–763X

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**ISSN 0974- 763X**

**Volume 14, No. 3**

**July, 2024**

**UGC-CARE Listed Journal**