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40 Years
K J Somaiya
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K J Somaiya Institute of Management

5th International Conference on Challenges in Emerging Economies on 'Business Agility and Sustainability in the Heuristic Environment'

in collaboration with

Association of Management Development Institutions in South Asia (AMDISA)

AMDISA

10th December, 2022

Editors
Dr. Satyendra Upadhyay
Dr. Deepali

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Conference Proceedings for
"5th International Conference on Challenges in Emerging Economies: Business Agility and Sustainability in the Heuristic Environment"

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Introduction to the Conference

'Business Agility and Sustainability in the Heuristic Environment'

Amidst COVID-19 pandemic, businesses have found themselves in a heuristic and rapidly changing environment that requires a significant level of agility and stability for sustainability. The pandemic era emphasized the increasing importance of agility and sustainability in the business scenario of the 21st century. While the pandemic appears to come to an end, challenges that test business agility and sustainability remain; hence the 5th International Conference on Challenges in Emerging Economies is titled 'Business Agility and Sustainability in the Heuristic Environment'.

The term 'heuristic' originally comes from the Greek word for "serving to find out or discover" Heuristics are strategies to solve problems that cannot be handled by logic and probability theory (Groner et al., 1983). In business, heuristics is a tool used to make accurate predictions in unfavorable circumstances like time shortages or insufficient data.

A business environment includes internal and external factors like employees, customers, clients, supply and demand, owners, management, etc. Heuristics entered the business world to accelerate the pace of change that characterizes the contemporary business environment. More than ever, the environment in which a leader must make decisions is becoming less predictable, resulting in "uncertainty becoming a defining characteristic of managerial decision making" (Artinger et al., 2015). Management in the new era demands the need to make critical decisions in a very short span of time. In such constraints, leaders use heuristics approach as simple decision-making algorithms.

In the context of business, agility refers to the rapid, continuous, and evolutionary adaptation. An agile firm innovatively responds to the environmental factors that keeps changing dynamically. Such dexterity of the firm offers it competitive advantage among others in the same industry (Lin et al., 2020; Ghasemaghaei et al., 2017). It is an evaluation of organization's capability to rapidly adapt to market and environmental changes in productive and cost-effective ways (Dyer & Ericksen, 2009). Business sustainability is about managing environmental, social and financial demands, concerns and responsibilities to have ongoing success, financially and ethically. It recognizes and appreciates the natural interdependence between living organisms and the environment in which they live. It values the different elements of society and their role in the social structure. It is "the art of doing business in an interdependent world" (Savitz & Weber, 2006).

Thus, the objective of this conference is to serve as a platform where researchers, practitioners, business consultants, academicians and scholars can exchange their ideas, experience and beliefs of functioning in the heuristic environment. Its goal is to identify and address challenges of agile and sustainable business processes in the heuristic environment. It aims to foster discussions on the various means and approaches that firms may adopt to make their business processes agile and sustainable.

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Themes & Sub-themes

Business Strategy

- Strategic Renewal & Innovation
- Environmental, Social, and Governance
- Organizational & Business Transformation
- Strategic Vision, Planning & Impact
- Corporate Sustainability
- Re-engineering Business Models Flexibility
- Strategic Corporate Communication
- Strategic Philanthropy
- SDG and Sustainability Targets
- Stakeholder Theory

Business Ethics

- Environmental Ethics
- Ethical Leadership
- Code of Conduct
- Corporate Governance
- Ethics in Marketing, Entrepreneurship, Finance, IT & HR
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- Ethics in Health & Safety

Entrepreneurship

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Business Communication

- Crisis Communication
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- Cross-Cultural Communication
- Virtual Communication & Technologies
- Health Communication
- Interpersonal Communication
- Gender & Communication
- Leadership & Communication
- Internal Communication
- Semiotics & Neurolinguistics
- Green Communication

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Somaiya Vidyavihar University

A new milestone in a glorious ongoing journey established in 2019, Somaiya Vidyavihar University, Mumbai, is a self-financed autonomous university recognised by the University Grants Commission (UGC). Somaiya Vidyavihar, with over six decades of rich experience in building and managing educational institutes of great repute, is the sponsoring body. Operational from 26th August 2019, Somaiya Vidyavihar University is a place where you can explore new possibilities, pursue your passion and above all, find yourself.

Somaiya Vidyavihar University is located in the heart of Mumbai and boasts of a sprawling green campus. The university is equipped with excellent educational, recreational, community, health, and sports facilities. Somaiya Vidyavihar offers students the flexibility to simultaneously earn degrees and certifications in multiple disciplines offered by our constituent colleges.

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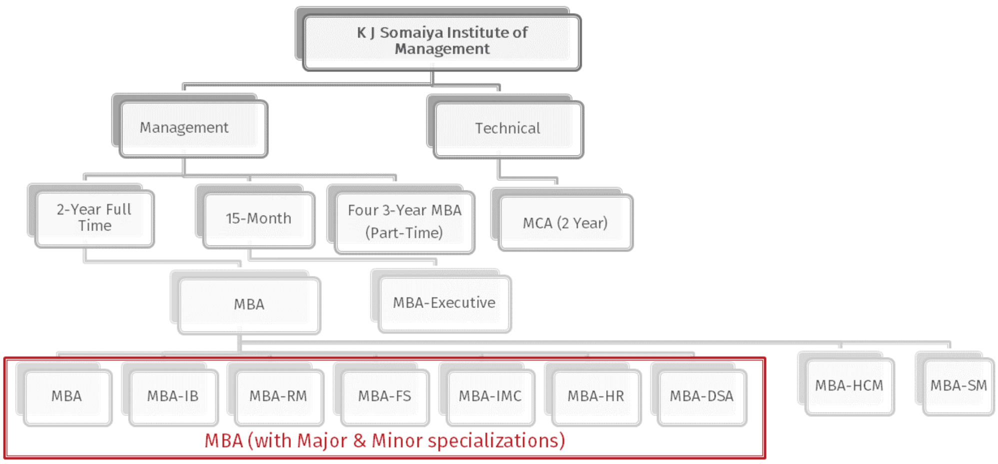
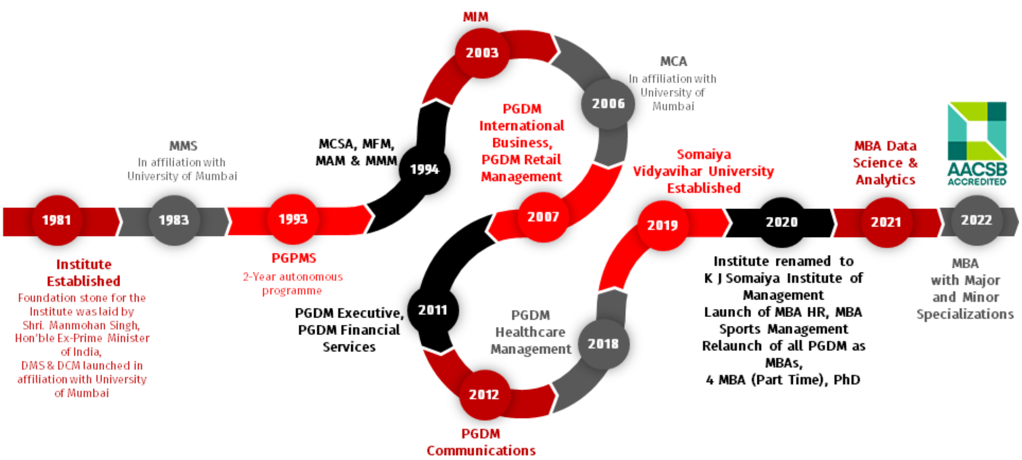
K J Somaiya Institute of Management

K J Somaiya Institute of Management (formerly K J Somaiya Institute of Management Studies & Research) was established in 1981, is currently a part of Somaiya Vidyavihar University with the objective of providing state of the art education in management and allied areas. The institute is consistently ranked among the Top-25 Management Institutes and Top 10 private sector B-schools in India. Over the past 4 decades, the Institute has evolved into a leading B-school offering employment-oriented management programmes. Apart from the regular programmes, the Institute offers customized and industry-specific certificate and executive development programmes for government bodies, companies, defense personnel and NGOs. The Institute became the 19th B-school in India to earn the coveted AACSB accreditation in 2022.



Important Milestones & Beyond



SOMAIYA VIDYAVIHAR UNIVERSITY
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40 Years K J Somaiya Institute of Management

Message by the Keynote Speaker

Prof. (Dr.) Fulufhelo Netswera
Executive Dean, Faculty of Management Studies,
Durban University of Technology, South Africa.

"Conditions under which business (big or small, national or international) operate today are highly fluid. In a forever globalizing world where technologies have taken over and where territorial boundaries have become mainly artificial, there are just too many interdependencies between economies, states, and individual firms. The levels of risks are heightened to levels never seen before such that any singular economic volatility in country X has serious consequences for firm Y in country Z.

The implications are that firms need to be agile, able to adopt quick learnings even from their peers in other countries and be able to adapt swiftly in these relatively flexible environments in which they operate.

I am honoured to be the key note speaker at this 5th International Conference on Challenges in Emerging Economies under the theme Business Agility & Sustainability in the Heuristic Environment."

SOMAIYA
VIDYAVIHAR UNIVERSITY
K J Somaiya Institute of Management

Director's Message

Dr. Raman Ramachandran
Director, K J Somaiya Institute of Management
Dean - Faculty of Management Studies
Somaiya Vidya University
Mumbai, India

5th International Conference on Challenges in Emerging Economies
Theme: Business Agility and Sustainability in the VUCA Environment

"Change has always been a constant. However, today the change is even more Rapid, Unpredictable, Paradoxical and Tangled (RUPT). Rapid; we all emerged out of pandemic with a relief but events in Ukraine followed in rapid succession; Unpredictable; who would have thought that a week after the Chinese communist party meeting, riots will break out across China; Paradoxical as stock markets in some countries seem to have reached all time high despite all the risks; Tangled because the war in Ukraine will perhaps lead to more mortality of people in Europe and some parts of the world due to energy prices and food shortages. Enterprises in addition to these variables also have to contend with the need to mitigate climate change. It is in this context that this year's conference theme of, 'Business Agility and Sustainability in the Heuristic Environment' is extremely relevant and highly contextual. I wish the organizers and participants the very best for great deliberations and impactful recommendations".

Best wishes,
Dr. Raman Ramachandran
Director, K J Somaiya Institute of Management
Dean - Faculty of Management Studies
Somaiya Vidya University
Mumbai, India

5th International Conference on Challenges in Emerging Economies

Business Agility and Sustainability in the Heuristic Environment

10th December, 2022

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Current Trends in General Management Area

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Strategic Human Resource Management in Higher Education Institutions: An Empirical Evidence Study

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Abstract

Background

Recent studies have worked to understand organizations' SHRM ("Strategic Human Resource Management") practices. But there is a substantial gap between conceptual and practical research on SHRM in education. Even though several organizations have acknowledged the significance of some aspects of SHRM, few actually use them regularly.

Research objective

The main objective of this work is to investigate the blending of institutional strategies with HRM through the examination of SHRM practices.

Methodology

A quantitative and qualitative research approach was chosen to examine the best practices of SHRM in education. The basic characteristics of SHRM approaches were established after reviewing the literature. These were recorded on the survey form, which was then distributed to the personnel of certain educational institutions to analyze the level of SHRM implementation. A total of 370 institutions were contacted, giving us a total of 750 responses. Respondents were approached using a simple random sampling method. The degree to which strategic HRM techniques were used at universities was assessed using statistical analysis to identify local areas and combine comparable characteristics together.

Conclusions

The research suggests supportive perceptions of participants; the higher education institutes studied have a high degree of SHRM awareness. Nevertheless, our education is facing main issues around the action of human capital, particularly school members, and wants to pay greater attention to their "SHRM" practices. The process of hiring and choosing employees is basically insufficient and requires efficient attention.

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Findings

The findings also demonstrated that the performance evaluation and incentive system does not ensure a “highly motivated” base of employees, particularly among expatriate staff. These results have significant implications for teachers, administrators, and other educators who are curious about implementing and enhancing their best practices in SHRM.

Future Scope

More universities, both private and public, should be included in future studies. Future studies should additionally take into account moderating factors, including workplace culture, organizational environment, and, therefore, the labour market. According to the analysis, the research offers a wealth of valuable insights into the SHRM world.

Keywords: COVID-19, Higher education institutions, Strategic Human Resource Management

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Antecedents of Sports Consumer-Based Brand Equity: A Systematic Review of Literature and Update in the Sports Sponsorships Context

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ABSTRACT
For long, sponsorships have been considered an effective tool for marketing communication. A steady escalation in the investment in sponsorship deals has emphasised the necessity to determine the consumer-related factors leading to its effectiveness. The study includes an updated review of the literature with the most recent findings, which will serve as the foundation for a comprehensive sport-consumer-based brand equity model. Even though sports sponsorship research has seen a great deal of empirical study, the market's dynamism has required ongoing assessment of the impacts of a few key individual-level factors on the processing of sponsorship information. From the perspective of sports consumers, this literature review has important implications for future research and sponsorship practices.

Keywords: Sports Sponsorships, Sponsorship Effectiveness, Sponsorship Information Processing, Consumer-Based Brand Equity

1. INTRODUCTION

Though sports sponsorships have always existed, it wasn't until the early twentieth century that brands began supporting sports objects such as clubs, events, or even athletes (Deloitte, 2019). While traditional media outlets like newspapers and sports organisations were the ones to start sponsoring sporting events, they are now attracting companies from various industries. Despite the headwind faced by the sports industry due to the pandemic, its estimated value in 2021 was up by 107% (Nielsen, 2022). However, despite the expansion of the business practice, the effectiveness of sponsorship in terms of the value generated remains questionable among firms. Thus, it is now critical to thoroughly understand sponsorship effectiveness to bolster sponsorship investments and optimize sponsor benefits.

Through this research, we aim at highlighting the impact of individual characteristics of sports consumers on the cognitive, affective and conative aspects of consumer-based brand equity in the sports sponsorship context. The proceeding of the current study presents the conceptual framework and discusses the factors and relationships established to achieve sponsorship effectiveness. To conclude, the observations in the literature review are discussed along with future research propositions.

2. REVIEW OF LITERATURE

2.1. ANTECEDENTS OF SPORTS-CONSUMER BASED BRAND EQUITY

Individual Level Factors

Several individual-level factors are deemed to be critical for the sponsorship message to be processed effectively and reap favourable results. The factors mentioned only illustrate their role in processing sponsorship-related information, which is the scope of this study.

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2.1.1. Attachment Points

Individuals' attachment to sports entities also influences their involvement with sports objects (Ko et al., 2010), knowledge regarding the sports object (Filo et al., 2009), experience and familiarity (Cornwell, 2013), and demographic variables (Kamath et al., 2020). Likewise, attachment points have been extensively examined, aiming to evaluate the cognitive, affective, and conative outcomes of sports consumers.

2.1.2. Involvement

Highly involved sports consumers are likely to acquire more knowledge about the sponsors and develop a positive image of them. Customers that are highly involved in the sporting entity are, therefore, more prone to respond favourably to sponsorship efforts. (Speed & Thompson, 2000).

2.1.3. Brand Knowledge

Sports consumers with higher knowledge regarding the sponsored event tend to process the sponsorship information differently in comparison to consumers with lesser knowledge (Roy & Cornwell, 2004). If a sponsor's brand equity is low, an individual may be dubious of the sponsorship of a certain event by a firm if they do not have sufficient or favourable brand knowledge of the sponsor (Roy & Cornwell, 2004).

2.1.4. Familiarity

Consumers' familiarity with the sponsor brand is another dimension under knowledge that has often been examined in sponsorship research (Carrillat et al., 2005; Doyle et al., 2014; Tsiotsou et al., 2014; Grohs, 2015). Consumers' familiarity with a product increases as their experience with the event or sponsor grows. This improves their ability to remember relevant knowledge, allowing them to refine their "cognitive structures" (Cornwell et al., 2005).

2.1.5. Demographic factors

As observed in sports marketing and management literature, demographic factors have also had a significant impact on sponsorship effectiveness, especially with regard to sponsor-object fit, sponsor awareness, and behavioural intentions.

2.2. SPONSORSHIP PROCESSING

2.2.1. Identification

According to research, fans who strongly identify with their favourite sports entity are more likely to support sponsor brands (Fisher & Wakefield, 1998; Gwinner & Swanson, 2003) and develop favourable behavioural intentions such as purchasing team merchandise, attending sporting events, or spreading word of mouth (Wann & Branscombe, 1993; Fisher & Wakefield, 1998; Hallmann et al., 2016).

2.2.2. Fit/Congruence

Studies in sports sponsorship have revealed the impact that congruence has had on brand equity and brand loyalty (Wang, 2017), purchase intentions of sponsor products (Koo et al., 2006), and brand attractiveness and word-of-mouth intentions (Woisetschläger et al., 2010).

2.2.3. Credibility of sponsor

Brand credibility is the consumers' trust in a company's ability to create and provide goods and services that fulfil their needs and wants. The interaction effect of congruence and credibility dimensions on sponsorship outcomes has often been emphasised in sports sponsorship literature.

2.2.4. Perceived sincerity of the sponsor

Research in sports marketing and management has also revealed that sponsors are more likely to have good responses to their sponsorship if people regard their intentions as sincere and selfless rather than just being driven by profit (Speed & Thompson, 2000).

2.2.5. Prominence

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The prominence of a brand in the market is thought to help people identify sponsors either correctly or incorrectly.

2.2.6. Implicit memory of sponsorship information

Even if consumers are unaware of the sponsorship contract, implicit memory is expected to increase the possibility of both prominent and non-prominent brands being included in their consideration set (Herrmann et al., 2011; Herrmann et al., 2014).

2.2.7. Trust

Findings in sponsorship literature have revealed that increased consumer trust in sponsor brands leads to the generation of favourable sponsorship outcomes such as attitudes (Alguacil et al., 2020) and purchase intention (Thompson et al., 2005; Mazodier & Merunka, 2012).

2.3. SPONSORSHIP OUTCOMES

Cognitive Outcome

2.3.1. Brand Awareness and Brand Image

Brand awareness increases the likelihood of sponsor brand purchases among fans. However, few studies in sports marketing and management have argued otherwise, stating that sponsor awareness is only the initial step to developing a favourable attitude and image and often affects consumers' purchase intentions. Moreover, positive feelings toward the team activate or enhance the attendees' cognitive processing of the sponsoring firm, thus improving the its image in their minds (Rai & Singh, 2020).

Affective Outcome

2.3.2. Brand Attitude, Brand Preference, and Brand Attachment

Sports consumers' attitudes toward the sponsor image and their affiliation with the team would influence the ultimate sponsorship result. However, mixed results were observed while comparing the effectiveness of both advertising and sponsorships towards consumer attitudes. While sponsorships are perceived to be more genuine, advertising seemed to have greater influence on the purchase intentions of sports consumers.

Conative Outcome

2.3.3. Purchase Intention and Word-of-Mouth

Though purchase intention has been considered a relevant substitute for consumers' actual purchase behaviour (Crompton, 2004a; Gwinner & Bennett, 2008), researchers have emphasised the importance of assessing the conversion of purchase intention to actual purchase behaviour. Consumers' past purchases, as well as their intention to purchase sponsored products, could thus influence their actual purchase behaviour. Likewise, consumers' attachment to a sports entity could also positively influence their perception of sponsor brands, further leading to favourable word of mouth and purchase intention.

3. METHODOLOGY

This study adopted a systematic approach to review both empirical and conceptual articles while shedding some light on and providing an update of the possible individual-level factors and the information processing mechanisms impacting sponsorship success.

4. FINDINGS

On reviewing 162 sports sponsorship articles, certain observations were made that could be critical from both academic researchers as well as marketers' perspectives. Accordingly, the study has offered us four perspectives:

- Geographical representation of the studies
- The methodology used in the studies
- The sample population for the studies

Theories adopted to study the effectiveness of sponsorship

5. FUTURE RESEARCH DIRECTIONS

Research Gap 1: Geographical coverage of the studies

Through this study, it is evident that most of the sponsorship literature to date has been extensively carried out in developed nations. Considering that many of the global sports sponsorships are now heading East (Nielsen, 2021), there exists a huge untapped potential for researchers around sponsorship studies to explore emerging economies.

Research Gap 2: Attention to evolving sports environment and technology on sports consumer behaviour.

Application of "neurophysiological" techniques in sponsorship studies are recent and has only started to gain prominence. More studies could explore its potential since it offers better insights into consumer behaviour through objective psychological data (Dos Santos et al., 2020).

Research Gap 3: Sponsorship effects in the e-sports context.

The Covid-19 pandemic has prompted businesses in several industries to enter the eSports market, which has enhanced sponsorship earnings. E-Sports viewership, too, has witnessed a steady rise in viewership, exceeding traditional sports viewership (Kim et al., 2021). Yet, the lack of scientific studies in the field of e-sports sponsorship has been emphasised by researchers in recent years (Cunningham et al., 2018; Hallmann & Giel, 2018; Stroh, 2017).

6. MANAGERIAL IMPLICATIONS

With sponsorships being the major contributor to revenue generation, it becomes important for marketers to understand how sponsorship success can be ensured and enhanced from a consumer's standpoint. By considering the individual-level factors and their possible information processing mechanisms, marketers can efficiently design the message to be communicated through sponsorship to reap the maximum benefit in the evolving sports environment. Further, the research gaps that have been identified lay a path for future research in sponsorship studies.

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Role of Mediators in Organizational Agility and Performance Relationship - A Conceptual Framework

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1. INTRODUCTION

Business organizations, whether large or small, are facing change persistently. Liberalization, globalization, emerging new markets, evolving customer preferences, economic and social threats like COVID-19, technological advancement, inflation, etc., are common challenges many organizations have faced. Being a part of the turbulent business environment, every organization must adapt for long-term survival. Dynamicity that transpires in the environment poses copious threats and opportunities to the managers, who need to efficiently avail the opportunities and gracefully face the threats using appropriate marketing strategies. Agility is one such strategy. Agility has become an indispensable organizational capability that enables an organization to be adaptive and competitive in a turbulent business environment. Agility fosters a customer-oriented organization. To put it simply, organizational agility is the ability of the entire organization to proactively and resolutely sense, respond, react, and seize unique market possibilities in the struggle to thrive in this dynamic, unpredictable, and fiercely competitive economic climate. The ability of a company to respond to client needs and its expertise in providing appropriate and prompt solutions are essential for long-term success (Jayachandran et al., 2004). As a result, organizational agility develops, which in turn affects the performance of the company (directly or indirectly) and is crucial for managers to consider.

Previous agility studies such as Goldman et al. (1995), Sharifi and Zhang (2001), and Yusuf et al. (1999) identified agility as a trait that strengthens the production system's ability to adapt to unforeseen changes in the market. According to literature, organizational agility first emerged in the setting of manufacturing. Scholars, namely Jackson and Johansson (2003); Ganguly et al. (2009), envisioned it as a manufacturing setup that can adapt to the demands of a changing market and develop between products and services in real-time to meet shifting client wants. Literature also outlines the importance of a number of skills that might enhance the influence of agility on organizational performance. A study by Rafi et al. (2022) stated that knowledge management capabilities have a positive influence on the organizational agility and performance of an organization. Specifically, capabilities like technology (Ravichandran, 2017), learning, collaborative knowledge creation (Al-Omoush et al., 2020) and innovation (Zhou et al., 2019) play significant mediating roles in the relationship of organizational agility and performance. However, these capabilities have been studied in a fragmented manner. Against this backdrop, and acknowledging extant literature, the following research questions are attempted to be addressed by this study:

RQ1 What are the major generalized dimensions of organizational agility that impact organizational performance?

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RQ2 Which are the significant capabilities that can mediate the link between performance and organizational agility?

2. THEORETICAL FOUNDATION AND LITERATURE REVIEW

An examination of agility literature revealed that agility positively influences an organization's performance (Ravichandran, 2017; Zhou et al., 2018). Despite the surfeit of literature on agility and its dimensions, there is a dearth of research studies that conceptualize organizational agility. Scholars like Zitkiene and Deksnys (2018) have formulated a theoretical framework of organizational agility, which included constructs, namely agility drivers, enablers, capabilities and practices. Agility drivers (market, competition, customer preferences, technology, social factors) were defined as the forces that mitigate environmental changes. Organizations need to sense the changes to identify the census of the current situation in order to respond to the dynamic environment through agility capabilities (sense and response) and enablers (structures, organization, processes, technology, HR network). This consequently would result in reflecting some action or practices in the form of an outcome, such as modification of procedures or new product launch. This model, however, lacked empirical validation. Different studies (Ravichandran, 2017; Zitkiene & Deksnys, 2018; Atkinson et al., 2020) have measured organizational agility dimensions, and drivers contributing to organizational agility have been examined in a fragmented manner.

Moreover, abundant literature includes functional aspects of agility like marketing agility, supply chain agility, business agility, etc., and lacks studies on organizational agility (Kalaignaman et al., 2020; Shams et al., 2021). Organizational agility is a broader concept as it takes into consideration the entire organization and not just one or two functional areas of the organization, and hence, it is essential to conceptualize organizational agility in a comprehensive manner. Also, existing studies (Zhou et al., 2019; Al-Omoush et al., 2020) have studied the relationship between agility and financial performance through mediating the role of capabilities like innovation and knowledge creation only. Al-Omoush et al. (2020) stated that collaborative knowledge creation has a substantial role in achieving e-business proactiveness in responding to environmental changes like the COVID-19 crisis. Scholars like Zhou et al. (2019) discovered that innovation capability mediates the relationship between marketing agility and financial performance. However, their study is limited to only one mediator (innovation capability) and ignores other potential mediators like market orientation, learning orientation, and entrepreneurial orientation. These studies suggested that other potential mediators like market orientation, learning orientation, and entrepreneurial orientation need to be studied in future research. The role of mediating variables such as learning, technology, service innovation, and collaborative knowledge creation is also suggested to be explored in different contexts.

2.1 Organizational Agility

Meaning

The derivation of agility is entrenched in the manufacturing industry, where adaptability to changes in the business environment requires both flexibility and quickness. In the early 1990s, this concept received recognition among experts and researchers in its adaption to business organizations, where there is a need for organizational compliance to change in this scenario of dynamicity (Harraf et al., 2015). The literature documents the growing attention among business researchers in the last few decades, and many efforts have been made to outline agility in the business world. To conclude, the roots of agility are found in the manufacturing sector, where researchers have defined agility in terms of different functional areas and postulated significant definitions of this concept.

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Organizational agility is one of the emerging constructs studied in the business literature. For more than a decade, agility has been defined from different perspectives. In general parlance, organizational agility is an ability of an organization to adapt to the changes emerging in the turbulent environment proactively and enables an organization to function efficiently and effectively in the unpredictable business environment. Empirical studies suggest that organizations responding quickly with innovative actions to changes in business environments can increase their performance and productivity (Ferrier, 2001).

According to Zitkiene and Deksnys (2018), organizational agility is an ability to recognise unexpected changes in the environment and appropriately respond swiftly and efficiently by utilizing and reconfiguring internal resources, thus gaining a competitive advantage in the process (p.118). Researchers like Dove (2001) and Goldman et al. (1995) defined organizational agility as a firm's ability to cope with rapid, persistent, and ambiguous changes and thrive in a competitive environment of continually and impulsively changing opportunities.

Dove (1996) further stated that organizational agility level depends on an equilibrium between its four dimensions: cost, time, quality, and scope. The concepts of speed and innovation as critical properties of organizational agility are also endorsed by Lu and Ramamurthy (2011). Recently, Kalaignaman et al. (2020) have related agility with crucial components such as sensemaking, speed, iteration and marketing decisions. Hence, organizational agility is the ability of an organization to sense the changes in the environment and respond efficiently to these changes.

2.2 Types of Agility

There are numerous areas of agility interlinked with organizational agility, such as supply chain agility, marketing agility, business agility, international marketing agility, strategic agility, etc. To gain a deeper understanding of organizational agility, it is essential to get insights into all these forms of agility.

2.2.1 Business Agility

Business agility is an emerging concept that sustains competitive advantage in an uncertain and turbulent environment (Sharifi & Zhang, 2001). It is defined as innovation through collaboration to predict challenges and opportunities before they occur (Heisterberg & Verma, 2014). An agile business mind is one that has a speedy, resourceful, and flexible character (Merriam-Webster, 2005). Such agile business organizations respond speedily, are resourceful, and they can adapt to their surroundings.

2.2.2 Marketing Agility

"Marketing agility is the extent to which an entity rapidly iterates between making sense of the market and executing marketing decisions to adapt to the market" (p.2) (Kalaignaman et al., 2020). Homburg, Theel, and Hohenberg (2020) recognised marketing agility as the main component of marketing excellence and defined it "as an organization's strategic means for performing growth activities by the marketing organization and its associates through basic structures and processes, reckless decision making, and trial and error learning" (p. 10). It is, in fact, regarded as a crucial precedence for achieving marketing excellence (Homburg, Theel & Hohenburg, 2020).

2.2.3 Supply Chain Agility

The term agile supply chain is used to describe the complete agility level of supply chain members, while the term firm supply chain agility is used to define the principal organization's ability to be agile by reallocating resources inside its supply chain. Researchers

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have defined supply chain agility as the ability of the organization to modify its operations within the supply chain to respond to environmental changes, opportunities, and threats (Gligor et al., 2013). An appropriate level of supply chain agility is essential for the smooth functioning of any business organization.

2.2.4 International Marketing Agility

It is a process beginning with agile logic (a nonconformist and open mental stance), leading to learning (being able to search and interpret data) and at the end resulting in agile actions (being able to commit, coordinate and respond quickly with the flexibility to ever-changing conditions) (p.263) (Gomes et al., 2019). International business enterprises functioning in ever-changing and unpredictable environments need to possess the ability to adapt and reallocate their resources constantly. Also, such enterprises need to reconfigure their operational mechanisms and quickly modify their international marketing choices to effectively enter new markets and exploit their needs (Chen et al., 2019; Vendrell-Herrero et al., 2017). Thus, in other words, it can be considered as the ability of management to continuously sense and respond to a fluctuating environment by deliberately making strategic moves and subsequently adapting the necessary organizational arrangement for efficacious implementation across the globe.

2.2.5 Strategic Agility

Marketing scholars have conceptualized strategic agility as the process of inventing new business models and new categories rather than rearranging old products and categories to cope with growing strategic discontinuities and disruptions (Weber & Tarba, 2014). It is also stated as a set of business creativities that an organization can voluntarily apply during times of changes in the business environment (Weill et al., 2002).

2.3 Dimensions

Different scholars conceptualized agile organizations using different dimensions. For instance, in a conceptual model postulated by Zhang and Sharifi (2000), speed, flexibility, competency and responsiveness are identified as the essential dimensions of agile organizations. Similarly, a four-component framework propounded by Lin, Chiu, and Tseng (2006) represent flexibility, responsiveness, competency and speed as the necessary elements of agile organizations. The major dimensions considered by key scholars such as Zhang and Sharifi (2000), Lin et al. (2006) and Kalaignaman et al. (2020) are discussed as under:

2.3.1 Speed

Speed is considered as a dimension of agility because speedy decision-making and proactive actions are a prerequisite for an organization to be agile. Since agility refers to the ability of an enterprise to adapt quickly to its environment and be adequately elastic in its marketing strategy, speed is one of its core dimensions (Zhang & Sharifi, 2000). It is especially significant in the present scenario as technology is evolving day by day and refers to the time taken by organizations to investigate market changes, take actions, gather feedback, and regulate marketing decisions. According to Lin et al. (2006), speed can be recognised through speediness in introducing new products, timely delivery of products and services and rapidity in operations (short operational lead times).

2.3.2 Flexibility

Flexibility is the capability of an organization to process different procedures and achieve diverse goals with existing facilities (Kalaignaman et al., 2020). It is considered as a key dimension of agility. It is described as an organization's capacity to adapt to the

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unprecedented changes in the environment malleable. It is also recognised as performing various works and accomplishing different aims with the same resources. According to Zhang and Sharifi (2000), flexibility is recognised in terms of product flexibility, product model elasticity, organization and organizational subjects' flexibility, and people flexibility.

2.3.3 Competency

Competency is another significant dimension of agility, which is defined as the ability to efficiently and effectively achieve the objectives and goals of an organization (Lin et al., 2006). It may be recognised with the help of strategic vision; apt technology, or sufficient technological capability; products/service superiority; cost-effectiveness; new products introduction; change management; knowledgeable, capable, and empowered people; processes efficiency and effectiveness; co-operation (inside and outside the enterprise) and integration.

2.3.4 Responsiveness

Responsiveness is a crucial dimension of agility. It is recognised as a skill of an enterprise to sense the prevalent changes in the market and react to these changes excellently (Lin et al., 2006; Kalaignaman et al., 2020). Responsiveness is the ability to recognise differences and respond swiftly and proactively to them and convalesce from such changes. Detecting, perceiving and antedating changes; instant reaction to changes and recovering from changes reflect the quality of responsiveness.

2.3.5 Others

In addition to aforesaid three dimensions, Kalaignaman et al. (2020) also discussed the concept of agility using the following key dimensions:

2.3.5.1 Sensemaking

Sensemaking is an organization's retort to an unexpected or abstruse change in the environment that involves observing and linking the development, founding a shared understanding of the development, and endeavoring to create a better environment to draw further indications (Maitlis & Christianson, 2014). Hence, in other words, sensemaking is the phenomenon of identifying changes in the environment quickly and is the first step of agility.

2.3.5.2 Iteration

Iteration infers to repetitively refining marketing decisions before relaunching or grading them. It is entirely dissimilar from being directed by a thoughtful plan and implementing "pre-orchestrated" marketing decisions- like organizational creativity (Moorman & Miner, 1998). It is considered quite significant in contributing to agility.

2.4 Role of Capabilities

Literature documents the role of various capabilities that can strengthen the impact of agility on organizational performance. Specifically, capabilities like technology (Ravichandran, 2017), learning, collaborative knowledge creation (Al-Omoush et al., 2020) and innovation (Zhou et al., 2019) play significant mediating roles in the relationship of organizational agility and performance. These capabilities are discussed below:

2.4.1 Learning Capability

Organizational learning capability has its origins in individual learning (Shrivastava, 1983; Senge, 1990). Organizational learning capability is defined as a dynamic process built on knowledge, which indicates moving amongst different stages of action, going from the individual to the group level, and then to the organizational level and back again (Huber,

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1991; Crossan et al., 1999). The collective knowledge, which is kept in the organizational memory (Walsh & Ungson, 1991), influences the category of knowledge attained and how it is understood and distributed. Scholars like Goh (1998) have defined organizational learning capability (OLC) as the organizational skill to exercise the processes that can accomplish learning effectively and efficiently. An organization's learning capability is also considered an impressive way to motivate the organization to perform better, grow and succeed (Hsu & Fang, 2009) and as a strategic lever to obtain competitive advantage (Goh, 2003). Also, studies suggest the steps that managers should consider for developing this fundamental capability (Chiva & Alegre, 2009). The learning of an individual in an organization critically depends on what is learnt by the other employees of the organization—in other words, on the mutual knowledge base (Simon, 1991). Thus, the learning capability of an organization enables it to function smoothly in changing market situations. The presence of a good learning atmosphere in the organization leads to improved performance. Hence, it could be inferred that learning capability plays a significant role in the relationship of agility and performance.

Scholars like Gomez et al. (2003) have defined organizational learning capability as a multidimensional concept. According to their study, management commitment, systems perspective, openness and experimentation, and knowledge transfer and integration are the dimensions of organizational learning capability. These are discussed below:

2.4.1.1 Managerial Commitment

The management of the organization must ensure and develop an atmosphere that encourages the attainment, creation, and transmission of knowledge as essential values (Stata, 1989; McGill et al., 1992; Garvin, 1993; Nonaka & Takeuchi, 1995; Vento et al., 2016). The scholars remarked that management should articulate a tactical sight of learning, making it a dominant element and a crucial tool that has a strong impact on the achievement of long-term results (Ulrich et al., 1993; Slocum et al., 1994; Nevis et al., 1995; Hult & Ferrell, 1997; Klendauer et al., 2009). Further, it should also confirm that the employees realize the significance of organizational culture and learning and are proactive to participate in its achievement (Senge, 1990; Slater & Narver, 1995; Spender, 1996; Williams, 2001). Lei et al. (1999), in this context, stated that the managers must initiate the process of change, take the accountability for drafting an organization that is capable of regenerating itself and adapt to new challenges. Committed attitude of the management is essential for establishing a learning culture and capability.

2.4.1.2 Openness and Experimentation

For successful functioning of an organization, an open and welcoming atmosphere allowing the entry of new ideas, enabling individual knowledge to be regularly rehabilitated, broadened, and amended (Senge, 1990; Leonard-Barton, 1992; Slocum et al., 1994; Sinkula, 1994). To create such a working atmosphere, prior commitment to cultural and functional variety is needed, as well as a willingness to take all types of views and experiences and to learn from them is needed (McGill et al., 1992; McGill & Slocum, 1993; Nevis et al., 1995). The development of an open environment in the organization leads to initiation of better ideas and views that could help in resolving problems occurring in the turbulent environment. Hence, openness and experimentation are considered significant to impact the relationship of agility and performance.

2.4.1.3 Systems Perspective

Every successful organization is considered as a system consisting of different parts, each having a significant function that acts in a synchronized manner (Stata, 1989; Leonard-

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Barton, 1992; Kofman & Senge, 1993; Nevis et al., 1995). Perceiving an organization as a system means recognising the significance of relationships through the transfer of information and amenities (Ulrich et al., 1993). This leads to the development of mutual mental models (Senge, 1990; Kim, 1993; Miller, 1996). In such setups, organizational learning results in the creation of collective knowledge, insights, and opinions that are enhanced by the presence of a mutual language and cooperative action by all the individuals involved in the process.

2.4.1.4 Knowledge Transfer and Integration

This is the last dimension that includes two interlinked processes-internal transfer and integration of knowledge, which occur concurrently rather than sequentially (Zeng et al., 2016). The efficiency of these two processes depends on the existing absorbent capacity (Cohen & Levinthal, 1990). Transfer implies the internal dispersal of knowledge attained at an individual level, whereas integration leads to the formation of a cooperative corpus of knowledge entrenched in organizational culture, work procedures, and the remaining essentials that form the organizational memory (Huber, 1991; Walsh & Ungson, 1991).

2.4.2 Collaborative Knowledge Creation Capability

Collaboration capability is crucial in turbulent environments where unexpected situations demand coordinated action (Tyler, 2001; Miller & Shamsie, 1996; Amit & Shoemaker, 1993). Basically, knowledge of collaboration helps the organizations to produce and transmit knowledge in quest of innovation and improved performance. People possess increased learning potential and knowledge development capabilities in groups within or across organizations due to the low spatial and contextual distance between individuals (Doz & Santos, 1997). It is well accepted that enhancement of knowledge takes place through interaction between individuals, and therefore such interactions must be supported in organizational setups. Collaborative learning is social learning where knowledge arises through interactions, active discussions between the learners while working in communities to accomplish a collective understanding. It is an iterative aspect through which knowledge is created in learners' heads functioning within a social framework. The main aim of collaborative learning is to augment the critical thinking of the learners by enquiring present resolutions and assumptions and by generating new ones. (Jakubik, 2008). Since collaborative knowledge creation enables the organizations to create and spread knowledge with an aim to improve innovation and performance, marketing literature states that collaborative knowledge creation is capable of playing a significant role between agility and performance.

2.4.3 Service Innovation Capability

Service innovation is defined as an innovation occurring in various aspects of services, including the introduction of new services or incremental modifications of existing services (Witell et al., 2016). As the dynamicity of the markets has increased, awareness about innovation and its processes has intensified. It is essential for organizations to innovate in order to respond to the evolving customer demands and lifestyles and to capitalize on opportunities presented by technology and changing marketplaces. Organizational innovation can be carried out in context to products, services, operations, processes, and people (Baregheh et al., 2009). Business firms with higher innovation capacity accept new ideas readily and hence are in a better identifiers of market opportunities. Hurley and Hult (1998) remarked that extremely innovative firms participate in learning and experimenting and are able to cope with turbulence effectively. Hence, such businesses are successful in introducing new products to markets before their competitors. Also, the integration of new business

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models with the rest of the organization enables the firms with high innovation capacity to accumulate the resources required to transport new products and services to markets or to reconsider their business models (Ravichandran, 2017). So, service innovation capability is essential for smooth functioning of an organization during the unprecedented times, and it plays a significant role between agility and performance.

2.4.4 Technology Capability

Information technology capability is an organization's capability to procure, implement, blend, and reconfigure technology resources in assistance and improvement of business strategies, policies and work processes (Sambamurthy & Zmud, 1997). It is crucial for an organization to recognise business value and maintain competitive advantage. Research studies have proved that information technology capability led to increased competitive advantage of the organizations (Bharadwaj, 2000; Bhatt & Grover, 2005; Mata et al., 1995; Ross et al., 1996). Previous research proclaimed that technology aided agility by hurtling up decision-making, facilitating effective communication, and responding quickly to changing surroundings (Lucas & Olson, 1994). Technological advancements create a wiring for the organization (Haeckel, 1999) and generate digital opportunities leading to improved performance (Sambamurthy et al., 2003). Thus, technological advancement is essential for an organization's survival in challenging situations, and it plays a crucial role in the relationship of agility and performance.

3. METHODOLOGY

The paper is conceptual in nature based upon extant literature review of organizational agility and capabilities. A comprehensive literature review of more than 50 articles on agility available from 2000 to 2022 was conducted to conceptualize and develop a research model on organizational agility.

4. CONCEPTUAL FRAMEWORK AND HYPOTHESES

On the basis of literature review, the study proposes a conceptual framework on organizational agility and performance relationship with four mediators, namely learning capability, technology capability, collaborative knowledge creation and service innovation (Figure 1). The hypotheses framed include the following:

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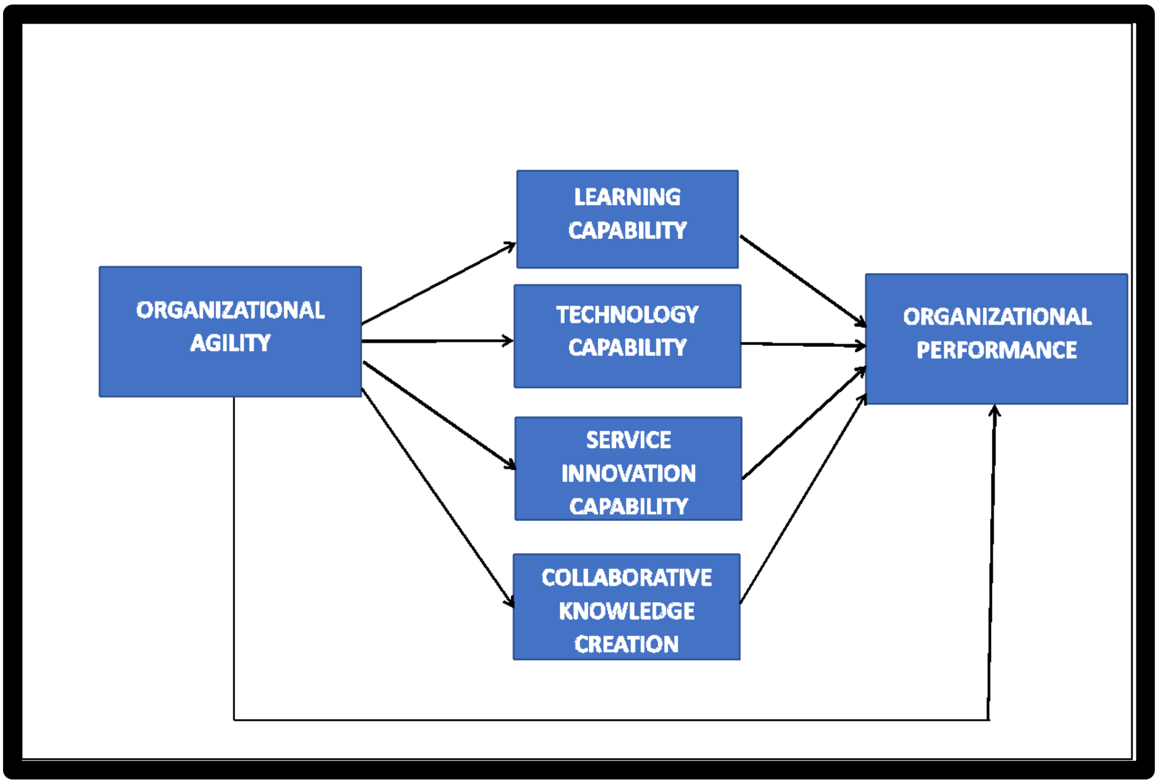

4.1 Organizational Agility and Performance

Agile organizations respond to market changes rapidly, thus gaining larger market share. Scholars, namely Jacobs et al. (2011) and Nafei (2016), stated that agile procedures lead to better asset usage and enable the firms to exploit their creative side leading to greater financial benefits (Roberts & Grover, 2012; Ravichandran, 2017). Organizational performance can be conceptualized as the blend of resources, abilities of the organization that are being utilized efficiently and effectively with a vision to achieve its objectives (Collis & Montgomrey, 1995). Scholars like Nafei (2016); Chakravarty et al. (2013); Cegarra-Navarro et al. (2016), and Felipe et al. (2020) have stated that organizational agility positively influences organizational performance. The results of these studies revealed that higher levels of agility resulted in improved performance of the organization. Thus, based on previous literature, it is hypothesized that:

Hypothesis 1: Organizational agility is positively correlated to organizational performance.

4.2 Organizational Agility and Learning Capability

Learning capability is defined as the ability of an organization to sustain or enhance its overall performance based on experience and intelligence. This is a comprehensive process that involves knowledge attainment (the construction or creation of skills, visions, and associations), knowledge exchange (the propagation of knowledge by one to others), and knowledge employment (amalgamation of learning to be conformed, made available, and widespread to new atmospheres) (Huber, 1991).

Existing literature depict a significantly rising interest in organizational agility and organizational learning capability. Based on previous studies, namely Mavengere and Tikkamäki (2013), it is affirmed that organizational agility encourages organizational learning capability. Owing to the growth and significance of the higher educational sector in the economic development of a nation, it is essential to explore the potential relationships

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between organizational agility and organizational learning capability. Hence, it is hypothesized that:
Hypothesis 2: Organizational agility is positively associated to learning capability.

4.3 Organizational Agility and Technology Capability
Technology capability is a strong enabler of organizational agility. Previous research (Tallon et al., 2019) recommended information technology as one of the most significant antecedents of organizational agility. Technology capability motivates strategic and operative management to cope with environmental dynamicity (Melián-Alzola et al., 2020; Aburub, 2015; Chen et al., 2014; Mandal et al., 2017). Past studies, namely Lee and Sher (2004); Barki and Pinsonneault (2005), show that knowledge collaboration between information technology and managers make it simpler for organizations to spot change prior to the selection of a collaborative course of action for accurate response. The subsequent alignment between information technology and business strategy can empower agility from the time when indispensable changes in business strategy can be effortlessly communicated to information technology managers. Also, the results of the study (Ravichandran, 2017) depict that technological advancement led to agile organizations and better performance. This makes technology capability an enabler of organizational agility. Hence, it is hypothesized that:
Hypothesis 3: Organizational agility is positively connected to technology capability.

4.4 Organizational Agility and Service Innovation Capability
Innovation is defined as the method of creating and marketing something which was not present before (Kline & Rosenberg, 1986). As the uncertainty of the markets have increased, awareness about innovation and its processes has intensified. It is essential for the organizations to innovate to respond to the evolving customer demands and lifestyles and to capitalize opportunities presented by the business environment. Previous studies (Rindova & Kotha, 2001) suggest that highly innovative organizations are more agile and ready to implement new ideas. This capability enables the organizations to perform better than their competitors. Hence, it is hypothesized that:
Hypothesis 4: Organizational agility is positively related to service innovation capability.

4.5 Organizational Agility and Collaborative Knowledge Creation
Collaborative learning is a social learning process where information arises out of discussions, energetic dialogues between learners while operating in groups to accomplish a shared understanding. It is an iterative process through which understanding is built in learners' minds working within a social context. The purpose of collaborative learning is to improve the critical thinking of the learners by probing existing solutions and beliefs and by creating unique ones (Jakubik, 2008). Previous studies (Al-Omoush et al., 2020) have suggested that collaborative knowledge creation has a positive impact on organizational agility. The extant literature (Maditinos et al., 2014; Nafei, 2016; Nissen & von Rennenkampff, 2017) reputes agility as the capability to accomplish and affect knowledge successfully, allowing an organization to generate a prompt response and adaptation to market turbulence and dynamicity. As per scholars like Naylor et al. (1999), agility entails the usage of market knowledge and alliance to discover different opportunities in unpredictable market space. A study by Altschuller et al. (2010) ascertained that the creation of knowledge and the skill to reorganize existing knowledge in the organization depict the worth of knowledge wealth in aiding organizational agility. Hence, based on this backdrop, it is hypothesized that:
Hypothesis 5: Organizational agility is positively linked to collaborative knowledge creation capability.

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4.6 Role of Mediators on organizational Agility and Performance

Organizational agility fosters firm's performance both directly (Nafei, 2016; Chakravarty et al., 2013; Cegarra-Navarro et al., 2016; Felipe et al., 2020) and indirectly with the help of mediators. Researchers like Zhou et al. (2019); and Al-Omoush et al., 2020 have postulated the relationship between agility and performance using mediators like innovation and collaborative knowledge creation The existing literature depicted a significant impact of capabilities like innovation, technology, collaborative knowledge creation and learning on organizational agility (Ravichandran, 2017; Gomez et al., 2003; Tallon & Pinsonneault, 2011; Weill et al., 2002) The results of these studies revealed that all these capabilities significantly impact the relationship of agility and performance. The present study strives to study the mediating role of these capabilities between organizational agility and performance. Hence, it is hypothesized that:

Hypothesis 6: All the capabilities (i) Learning capability, (ii) technology capability, (iii) collaborative knowledge creation capability, and (iv) service innovation capability (individually) and collectively (v) mediate the connection between organizational performance and agility.

5. CONCLUSION/FUTURE RESEARCH

The present study aims to postulate a conceptual framework that defines a through a variety of competencies, organizational agility and performance are correlated. (service innovation, technology, learning and collaborative knowledge creation). The theoretical framework needs to be tested in different service and manufacturing sectors and developing and developed contexts to understand and establish the role of mediators, namely learning capability, service innovation, technology capability and collaborative knowledge creation between organizational agility and performance. Future studies could also test the impact of different types of abilities, like business agility, supply chain agility, marketing agility, etc., on the performance of an organization. Besides, alternative models, including capabilities as antecedents of organizational agility, could be tested in future studies. In addition to this, the future empirical studies could investigate the impact of organizational agility using various dimensions like speed, responsiveness, flexibility, etc.

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Analysing the Multidimensional Framework of Social Media Functionality and its Impact on Destination Building

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Introduction

The internet has altered the tourism sector by acting as a source of information as well as a sales channel. Tourist reviews, photographs, videos, stories, and recommendations, as well as online advertising, are bringing destinations closer to potential tourists, no matter where they are in the world. As a result of the internet's accessibility and cost, a new business environment and new business practices have evolved. In its brief history, the internet has progressed from a static tool for digital publication to a completely dynamic platform for cooperation. Tourism is an important source of revenue for many locations; yet, financial limits and changes in media and technology necessitate changes in communications tactics and how destinations present themselves in the global market. Survival requires the use of modern media and technologies. New media marketing is less expensive and provides several opportunities for visitors to contribute in attracting future tourists to locations.As a tourist marketing tool, social media is gradually persuading destination marketers that it is an integral component of marketing campaigns and efforts. Visitors no longer believe advertising that highlights the benefits and distinctive aspects of the locations. Visitors want personalised service as well as intelligent, imaginative, and engaging communication and messaging that involve empathy and emotions. They want to be involved in the development of tourism products and to make purchases based on connections. Social media may help places stay competitive if they create entertaining content, use innovation, and promote and drive collaborative dialogue.Locations may reach out to visitors using social media at a lesser cost and with greater efficiency than more traditional communication methods. If the place wishes to compete in the highly competitive global tourism industry, it must stand out. The destination will be obvious with a well-developed marketing approach that relies on social media. On social media campaigns, novelty, opportunity to win, celebrity engagement, uniqueness, unexpectedness, competitiveness, consonance, or creative graphical design can be game changers. With this in mind, this study defines tourism destinations and categorises social media and tourism communications. It discusses the key components of social media in relation to destination communication strategy, as well as changes in visitor behaviour that affect destination tourism in the tourism industry.

Literature Review

Social Media Functionality

There are various researches that have highlighted the focus on the functionality part of social media marketing. Kietzmann et al. (2011) defined and developed a honey-comb framework of social media on the bases of seven functionality building blocks namely identity, conversation, sharing, presence, relationships, reputation, and group. On the same lines, Silva et. al. (2020) also analyzed the honeycomb social media functionality model to increase

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organizational engagement through Facebook. Furthermore, Latib et al. (2020) examined social media functionality as a key factor for nurturing civic engagement.

Green destination Tourism

The term green tourism refers to any type of tourism activities that speaks about the natural environment and cultural legacy of an area. Green tourism also helps in keeping in account the requirements of local people and its environment for present and coming times. Made et al. (2019) green tourism refers to tourism that is environmentally friendly in various ways. On both sides, green tourism deals with eco-responsible tourists or prepares environmental services for tourists. Various researchers have suggested that the destination image includes two interrelated sub-components: cognitive and affective image. (Gartner, 1994; Agapito et al., 2013; Afshardoost and Eshaghi, 2020). While defining these variables, Gartner (1994) suggested that cognitive image relates to fact-based information and statistics about the destination and affective image includes the stimulus that motivates for selecting a destination.A study conducted by Rodriguez and Martin (2008) explained that the cognitive image signifies an assessment of the perceived characteristic of the destination with or without prior stay. Also, Hallmann, et al. (2015) described affective images as part of replicating people's emotional reactions and approaches to destination.

Methodology

Non-probability purposive sampling technique was used to collect the data through questionnaire from 150 respondents visiting the famous touristic destination of Ladakh using non-probability convenient sampling technique. The questionnaire (based on Likert scale varying from 5 strongly agree to 1 strongly disagree) for the study was developed taking the items from the past literature related to the constructs of social media functionality and green destination image.

Data Analysis/Results

This study used descriptive statistics to check the demographic characteristics. Further, to check the multidimensionality of the social media functionality scale exploratory factor analysis (EFA) using principal component analysis was run on the overall items to identify the factorial structure. Through analysis, seven factors namely, identity functionality, conversation functionality, sharing functionality, presence functionality, reputation functionality, relationship functionality and group functionality were identified. To confirm these factors confirmatory factor analysis was used (CFA). Further, the data was subjected to ANOVA test in order to investigate the variation in social media functionality with respect to frequency of writing and demographic factors (gender, age and income) of the respondents.

Discussion/Conclusion

This study aims to check the dimensionality of the social media functionality. Through analysis, seven factors namely, identity functionality, conversation functionality, sharing functionality, presence functionality, reputation functionality, relationship functionality and group functionality were identified. Therefore, this study contributes a detailed insight into the utilization of social media functionality in tourism. The study has significantly analysed and confirmed the use of social media platforms and other associated information about the destination which helps in stimulating the activity of the visitors thereby forming a positive image of the destination in their minds.

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Implications

The outcomes of the study will deliver insightful outcomes related to the role of social media functionality in developing and maintaining destination image with social media-based marketing. Moreover, the study will assist policymakers in the tourism domain to move their strategies according to the contemporary issues taking place in the current scenario.

Keywords: Tourism, Social media functionality, Destination image.

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The Contribution of Green Human Resource Management Practices Towards Corporate Sustainability in UAE

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Abstract
Sustainability over the last decade has become an integral part of doing business across industries. Organizations need to move on from being an "add-on" to "what next" and in doing so they have to balance their financial, social, and environmental obligations toward achieving their strategic corporate Sustainability initiatives. The environment has become a key driver from a corporate social responsibility perspective for creating sustainable businesses. Herein, green HRM is a step towards effective management of resources that can make a difference by contributing to the productivity and profitability of the organization. Therefore, the more imperative to implement corporate green management initiatives to have a sustained competitive advantage. This economic fact represents an enormous opportunity to reinvent what companies do and how they do it. The current study looks to assess the impact of green human resource practices on corporate sustainability in the UAE.

Keywords: Sustainability, Green HRM practices, Environment, U.A.E, Corporate sustainability strategy.

Introduction

We are today witnessing the emergence of an environment-centric approach to business practices. This has set in motion a new work order wherein employees are more connected to their jobs beyond the traditional workday and workplace. The resulting impact got organizations to work towards an equilibrium between an individual's work and personal life, with the keywords "accomplishment" and "peace." Also, a significant reason for this transition is changing employee perceptions of where they would want to be seen, aligning with an organization with environmental protection as one of its key objectives. This resolve to build environmentally sustainable economies has risen because of the increasing awareness of societal governance within civil society. As a result of the growing environmental issues, we are seeing enhanced participation from a range of stakeholders willing to collaborate and contribute towards environmentally sustainable business practices. This has motivated organizations to integrate their business models with environmental management systems.

The corporate world has been at the center of all discussions related to sustainability and its part in contributing to ecological and environmental imbalance on a global scale. Changing climatic conditions and environmental deterioration are the foremost of them. This situation has been driven prim facie by ubiquitous economic liberalizations. This has seen the emergence of corporate social responsibility as a catalyst to create and maintain a sustainable business. The well-being of societal, environmental, and economic factors being the key to re-engineer business processes, and the ways goods and services are delivered. Sustainability means maintaining natural systems and resources and yet remaining ecologically diverse by maintaining and sustaining a modern way of living.

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Sustainability is to know about the functioning of a natural system capable of producing all that are required for maintaining fine ecological balance by providing resources to maintain and sustain modern way of life for human civilization. Business organizations need to fulfill sustainability demand by responsibly using resources not for merely private welfare but for broad social needs. Therefore sustainability and environmental protection interventions started to become the core of Strategic business decisions for corporates. Green HRM is a step towards the effective management of people resources by organizations that can make a difference in profit maximizations for corporates and the planet's sustainability. In today's scenario sustainable HRM can play a pivotal role in maintaining a striking balance between the people, the planet, and profit. Rather, green HRM is an emerging way to achieve sustainability through best practices, enacting suitable policies, and balancing multi-disciplinary domains of corporates striving for profit maximization (S. Vanka et al, 2020).

Green HRM, which is motivating people and practices to inculcate the culture of performance through renewed sustainable HR Practices, is the way to sustainable business. Inspite of diverse views, in general, GHRM practices are considered to revolve around, Talent acquisition and selection, learning and training, performance management, Compensation and benefit and Green Involvement. Green HRM has forced a compulsory paradigm shift from prevailing reciprocated benefit focused HRM to new organization – stakeholder's relationship HRM focused on pro-environmental sustainability attempting to utilize natural resources for economic activities. Figure 1 below demonstrates the various outcomes contributing to the Green human resource management with view to achieving corporate sustainability objectives.

Figure 1 *Green HR requirements (needed to achieve corporate environmental objectives)*

Green Competencies	Green Attitude	Green Behavior	Green Results
Knowledge and skills about Greening	Cognitive Aspect (believing in Greening) Affective aspect (positive feeling)	Green organizational citizenship behaviour	Green innovations Green outcomes

Source: Opatha, H.H.D.N.P., & Arunrajah, A. Anton. (2014), *Green Human Resource Management: Simplified General Reflections, International Business Research, 7(8), 101-112.*

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In the MENA (Middle East and North Africa) region, a lot of study has been done, especially in Saudi Arabia. A closer look into the SME'S did evidence the fact that due to high cost considerations, they would prefer to acquire people who are already oriented to a green culture. On the contrary the governmental sectors do look to invest in their existing work force by looking to develop in them not just environmental awareness but also get them to imbibe sustainable environmental practices.

UAE Green Agenda 2015-2030

The UAE cabinet in January 2015, as part of its sustainability vision approved the Green Agenda for the period 2015-2030. In January 2015. The key strategic objectives being fivefold. a) Social development b) sustainable environment c) Competitive knowledge economy d) clean energy and e) sustainable use of resources. As a part of this initiative companies were encouraged to align to this objective by providing incentive schemes for businesses in UAE and supporting green manufacturing practices and promoting green jobs to fresh graduates especially the Emiratis which was to be aligned with the Emiratization charter.

The United Arab Emirates (UAE) has always kept the environment at the top of its agenda given its cultural legacy. To this effect, they introduced many frameworks that were legislative and institutional in nature and also successfully implemented many such environmental projects. That said, its contribution towards mitigating the effects of climate change has also been at the international level in terms of controlling gas emissions and building resilience and capabilities by using the opportunities to establish a sustainable green economy.

Literature Review

In order to achieve alignment between business strategy and organizational outcomes it is suggested to have a number of best HRM practices focused on facilitating individual outcomes (Chuang et.al, 2016). The determination of a suitable HRM System is dependent on contextual business strategy including employee's skills, experience and knowledge. Therefore, it is of paramount importance for organizations to select appropriate HRM practices to align with a sustainable HRM system (Lepak & Snell, 2002).

The combined effect of sustainable HRM points that polarization of financial, employee/family and environmental effects of corporate sustainability are independent. However, practitioners are of the opinion that implementation of a green HRM system will help optimize the costs from an employee perspective and help reduce the carbon footprint. For organizations to have an effective environmental management system and be successful, the HR management needs to contribute through additional efforts towards this effect (Rothenberg, 2003). It was further stated that the desired results of environmental performance would require HR interventions towards implementing and maintaining the organization's environmental systems (Jabbour &Santos, 2008).

In terms of sustainability a significant number of HR executives are keen to align their organizations from an ecological perspective and thereby seen to be in the forefront as a key contributor to the environmental cause. To a large extent, through empirical research using various parameters, one has been able to highlight the impact to organizational performance on account of environment management practices (Iraldo et al, 2009; Yang et al, 2010). The extant literature has given prominence to accepting of environmental practices by HR leadership by incorporating them in their human resource management practices (Cherian & Jacob, 2012).

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Sustainability in the long run can be as challenge as it would need commitment from all the key stakeholders. Moreover, it will require consistent and regular evaluation so as to be able to make changes to the sustainability initiatives. Therefore, the need for organizations to be able to develop the ability and constantly adapt their sustainable practices or develop their eco-capabilities (Fiksel et al., 2014).

Managing and sustaining relationships through resilience, demonstrates the ability of those systems to adapt and absorb changes. Literature in management has used resilience to shows the significance and ability of organizations to adapt (Holling, 1973). Organizations, on their part due to greater public awareness have given importance to various environmental issues and contributing to solutions to the ecological issues (Bansal & Roth 2000). This is reflected in the rise of reporting standards globally wherein HR management is in alignment with environmental management policies and practices(Ehnert et al. 2016).Hence a greater acceptability and compliance to Sustainability practices by governments, business leaders, consumers and communities(Jackson & Renwick 2011). As part of the business strategy organizations today are looking to have that sustained Competitive advantage on the basis of social legitimacy(Hart, 1997).

This sustained competitive advantage can be achieved by having the Competence to manage resources and with a high degree of the process knowledge which forms the essence of dynamic capability (Eisenhardt &Martin, 2000). To facilitate this implementation, it is imperative for a resilient business to have a collaborative approach by developing talents who will be involved in the change process which will elicit positive responses (Barreto, 2010). Hence critical alliances and strategic partnerships have to be maintained from a long term sustainability point of view (McCann et al., 2009).

It was suggested that GHRM should encompass aspects like Green vision, training and development, green performance management apart from having green incentive programs (Milliman & Clair, 1996). In spite of the diverse nature of the views stated, these practices were further endorsed with the addition having green talent acquisition and selection coupled with green involvement. (Jabbour et al, 2010; Jackson et al. 2011; Renwick et al, 2013 ; Zibbaras &Coan, 2015).

A distinction was made between the competitive and functional aspects of GHRM with many dimensions like green job analysis, job descriptions, green performance management to state a few with key strategic sub dimensions that include, culture, Organizational learning and team dynamics(Jabbour et al.,2010). Also developed was a measure for GHRM which included employee life cycle and empowerment (Zibarras, & Coan, 2015). A similar measure to assess various green interventions was undertaken with the inclusion of compensation to this dimension (Guerci et al, 2016). Newer dimensions of GHRM, like green work life balance, health and safety, participation by employees in the process of decision making were also measured (O'Donohue &Torugsa, 2016). Additional key sustainability processes which got identified were, strategic HR planning, managing and leading change.

The results highlight the impending challenges that would be faced by HR leadership whilst aligning green HR practices with the traditional model. This would extend further wherein the top management needs to be demonstrating the significance of building these strategic capabilities (Colbert & Kurucz, 2007).

Green Talent Acquisition and Selection

Organizations can attract and choose candidates who will commit to environmental issues (Jabbour et al, 2008). Green recruitment and selection has been viewed as an important component in GHRM practices (Ahmad, 2015; Jackson et al, 2011). Based on previous studies we can summarize green talent acquisition from three aspects, which is, candidates' green awareness, green employer branding, and green criteria to attract candidates (Renwick et al, 2013).

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Green Learning and Training

Green training (GT) comprises activities that would help motivate staff to have necessary skills about environmental protection and be aware of the issues relating to the environment that is key towards achieving environmental objectives. (Jabbour, 2011). Green learning and training should be made part of the educational programs that are to be provided to all in the company and not restricted to those directly involved in environmental management (Fernandez et al, 2003).

Green Performance Management

Green performance management (GPM) assesses and evaluates employee initiatives towards their contribution to environmental management. (Jabbour et al, 2008). The focus of much research on GPM has been specific with regards to giving feedback and having unbiased performance metrics. (Jackson et al. 2011; Zibbaras& Coan, 2015). However, there have been discussions suggesting that all mechanisms for evaluating GPM are organization specific and based on their respective business dynamics (Marcus & Fremeth 2009).

Green Compensation and Benefits

As a strategic HR approach, green compensation and benefit mechanisms have both financial and non-financial reward mechanisms to attract, retain and also provide a motivational platform for employees towards achieving environmental goals (Jabbour et al. 2013; Mandip, 2012). Reward and incentive mechanisms would be a very powerful measure to align employee's performance to the organizational sustainability goals as against regular HR practices (Jackson & Seo, 2010).

Green Involvement

It is important to have Employees be provided with the opportunities to be involved and participate in various management initiatives for sustainable practices. This would help stimulate them to collaborate, support and identify environmental opportunities. Accordingly, five factors towards this effect were considered: a) Green vision b) green learning climate c) Green communication (Renwick et al, 2013).

UAE Perspective

It has been commented on the fact that there have been researches done in UAE about sustainability. But those studies were mainly directed to the public sector Companies. One of the aspects that was covered was about renewable energy (Al Shehhi .et.al, 2021). Quite a few researches have been done in the UAE about sustainability. One of them being in the field of renewable energy. However, a similar opinion in terms of the direction of study of green HRM in UAE is also made (Qureshi et al, 2020). The study to an extent was on the impact of Green HRM with respect to the manufacturing sector SME, with a view to inspect the link amongst green leadership, green innovation, and environmental performance (Singh et al, 2020). In summary, firms need to identify the best approach to utilize human resources towards achieving corporate sustainability goals in the UAE.

Though five factors were looked at in the above literature, a lot of structured measurements and empirical validations would be still required. In essence a standardized scale would be essential going forward.

Research Methodology

The author resorted to a secondary research method, by way of case study wherein the green human resource practices in certain industry sectors were explored. In this regard, the target industries were in the hospitality and banking sector which was from the private sector in the UAE. The concerned officials were HR directors from the respective industry verticals who were chosen for these discussions. In this regard, a very structured questionnaire was prepared that was to reflect sustainable HR policies and its various interventions. The

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responses were however, very descriptive in nature. Their views, the basis of the discussions, had the following perspectives that were brought out.
In light of the competition within the industry the organization had to differentiate itself towards achieving a sustained competitive advantage. More so, since, there were other innovative entrants in the marketplace with different business models. This compelled them to innovate in order to be more responsive to such a conscious pool of customers given the preference they had in terms of their needs.
From a strategic point of view they had to incorporate sustainable practices not just to align with the UAE government mandate but also give greater impetus to organizational competence. Secondly, it was also to imbibe global best practices within this area so as to be part of that standardization. It is here that they incorporated sustainable practices within the HR strategy which was in line with their corporate sustainability strategy. The roll out of this was through introducing these interventions in the HR policies. Unlike strategic human resource management, which has organizational performance as its primary objective, the sustainable HRM has a much broader and a wider dimension to it, with importance given to not only financial and social but also ecological goals.
It was also from a long term perspective of employee development as a core outcome of the HR process. In terms of sustainable practices, they looked at key aspects within the employee life cycle from hiring, to developing environmentally conscious employees supported through effective training and performance measurement so as to inculcate green behaviors in employees. Accordingly the compensation and benefit process was aligned towards rewarding employees for such behaviors with consistency being the key. Towards this effect, technology was a critical success factor.

Case Study 1:- Leading Hotel Chain
In continuation, the discussion with the HR director of the hotel chain also threw light on some of their green HR practices which are as under.

Green Talent Acquisition and Selection
Green Talent acquisition was viewed as an important component of their HR strategy. As such three significant candidate attributes were considered. They were green awareness, employer branding, and green criteria to attract candidates. The premise being employees who are of environmental value have been found to actively contribute to the operational process, which in turn enhances the environmental performance of the organization. This is so, as Job-seekers today tend to solicit information about an organization's performance with respect to the environment which would provide insights and description as criteria to judge how organizations treat their employees. But in terms of the talent acquisition and selection practice they resorted to E- recruitment for the end to end within this process. It was a positive move to go paperless. Since they had a global perspective, and had employees from all over the globe, even the initial interviews were online by means of video conferencing. These practices became embedded as part of the hiring and selection process. Further it was stated they were in the process of introducing AI as part of business automation and for assessment of behaviors too.

Green Learning and Training
Herein, the organization looked at three aspects: awareness enhancement, knowledge management, and climate building as part of their green training and development efforts. The objective was to create and further enhance their awareness of sustainable environmental practices. Being a very labor intensive sector, this was a crucial HR intervention towards its alignment to corporate sustainability goals. It was of paramount significance to get employees to be sensitive towards environmental protection and control, especially in the area of pollution and waste management. Therefore green training programs were developed to support this. Further, as part of continuous learning to achieve consistency, employees were encouraged to upskill and re- skill themselves in this area. Therefore green knowledge

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management coupled with green skills was critical to building green Competencies amongst employees. The HR director stressed the fact that integrated training not only had training programs that were comprehensive but was integrated and linked them to appraisals and their performance management system. This was a way to create an environmental work climate.

Case Study 2: Banking Industry

The discussions with the HR Director from a leading Private sector Bank in UAE, gave meaningful insight to some of the other Green HR practices in the areas of performance management, compensation and benefits and more interestingly green involvement.

Green Performance Management

As briefed by the interviewee, Green HRM implementation also to a very large extent depends on the employee's commitment and inclination towards sustainable practices within the organization. It has therefore become imperative for the organization to have an underpinning understanding of employee performance on a regular basis towards this effect. As a result, agility has assumed significance in an age that is being disrupted by digital influence and globalization.

In particular, from the point of view of measuring green performance, the bank did introduce specific metrics to measure and quantify the contribution of each employee. This became integral as part of the performance management planning process from the very start. Therefore, it was all the more important to identify the right green performance indicators. Accordingly the parameters were on the basis of translating environmental objectives into realistic action plans. Environmental incidents, environmental responsibilities, reduction in carbon footprint were some of the other indicators in place. Things like paperless usage, carpooling, conventional energy usage were some of the factors that were factored as an evidence for green competency measurement. An interesting outcome that was observed was that the integration of green HRM practices along with traditional HRM resulted in employees churning out a better performance. The key to this was the communication of the benefits for adopting such practices, not for just self but also for the organization. In this way the bank's leadership was able to effectively communicate the essence of "Thinking Green " and how it contributes to corporate sustainability and being socially responsible. Being a financial enterprise, fintech added that panache in the form of technology to have a tactical approach to performance appraisals. It helped develop a fair and objective performance appraisal system to formulate performance standards with relevant Green goals. This would ultimately have two elements coming through. One is voluntary green behavior and the other being task based green behavior. This was in line with what has become to be called as "Ecopreneurship".

Green Compensation and Benefits

From a green compensation and rewards point of view, to motivate staff, it was only natural that incentives and rewards were needed to align employees' green performance with the firm's goals. Hence a healthy mix of both financial and non- financial reward mechanisms were introduced in the form of green travel benefits, green recognition , paid vacations and gift cards.

Green Involvement

The above mentioned practices encouraged employees to be involved in green activities and be proactive about environmental protection. Hence the concept of Green involvement became a norm wherein employees were motivated to participate in activities like developing groups for problem solving, writing quarterly newsletters and being proactive in identifying

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and putting together Green teams. Green involvement also encouraged the employees to accept and be part of business re- engineering processes.

Discussion & Conclusion

In this research work, an attempt was made to showcase some of the green practices adopted by certain organizations in the UAE. It also does provide some useful insights of the green practices implemented by those organizations where sustainability has become an area of significant importance at a National level. The study broadly looked into few areas like a) Green Talent Acquisition and Selection, b) Green learning & training c) Green Compensation and benefits, d) Green Involvement.

Whilst profit maximization has been the endeavor for many organizations, the concept of green HR sustainable practices are still in its infancy amongst largesse of the originations in UAE. HR leaders across organizations need to be more proactive and instill a sense of responsibility and ownership in every employee towards a sustainable green human resource management. This is possible when there is collective buy-in by various business stakeholders to this agenda of corporate sustainability. The benefits from this study could provide meaningful insights to develop green strategies which in turn adds more credence to corporate sustainability.

GHRM practices like, Green Talent acquisition and selection, green learning & training, green performance management, green compensation and benefits and green Involvement is vital and has a significant influence in creating green behaviors at the workplace. Therefore, the need for organizations to give importance and priority to these respective Green HR functions. In other words, it would enhance the productivity, efficiency and profitability through the inculcation of green behaviors amongst the employees. It could further give companies the first mover advantage within their industry vertical which would give them a competitive advantage. Environmental protection and sustainable development being the effective outcomes. From a corporate image perspective such organizations will be viewed as being a responsible environment conscious body.

Limitations

The above study does not have an in-depth – statistical analysis, given the very limited level of Green Human resource practices in the market. Hence the case study approach. Also there was an element of time constraints too for any primary based research work. Whilst there was the social and economic dimension to sustainability, focus was more on the environmental dimensions with respect to Green HRM practices. Also other green HR interventions like Green Job analysis & design, Green health and safety management, Green orientation and induction were not considered.

Suggested Recommendations

Whilst the UAE government has laid down its vision for sustainability, it becomes an onus upon the organizations to take it upon themselves to incorporate this as part of their business strategy. Green HRM, through activities like green talent acquisition and selection, green Learning and training, green performance management, green compensation and benefits and green involvement, should form part of strategic HR in organizations.

Green concerted efforts have to be made to increase awareness about Green practices to employees and thereby getting them to “THINK GREEN “. Green employee engagement is a way forward to this effect towards achieving environmental strategies and goals. To foster the culture of green thinking, it needs to start at the grass root level. Hence, it needs to start at the educational institutions who need to, as part of their programs, need to orient students towards building a green culture. This will provide the platform towards the creation of a future green workforce. It can be inbuilt as part of socially useful productive work. Through this they can be made aware of the aspects of waste management, recycling and reuse, use of technology.

Future Scope of Research

For researchers there is a large scope to explore in the area of green human resource management in the Middle Eastern region as it is still in its infancy. This was very evident whilst reviewing the literature which had significant gaps more so within the UAE and as brought out in the case study. Future scholars can look to conduct study of such practices in other sectors like services, MSME'S, Retail, and Manufacturing. Also many sub factors with each area of Green HR intervention could be a huge scope for researchers as well. It also provides an opportunity for academia and HR professionals to collaborate towards guiding the industry to implementing green Sustainable practices.

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The Consequences of Climate Change on the Agricultural Revenue of Indigenous People: A Focus on the Adverse Effects of Teak Plantation on Soil

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Abstract
Teak plantation plays an important role in earning money and fostering the economy. However, it causes landslides. Due to the severe effects of landslides, firm lands degrade in the Rangamati area. Therefore, it has negative impacts on our fertile land. In addition, climate change continues persisting, causing detrimental effects on natural resources. By comparing the current agricultural revenue with agricultural revenue (on average) from 10-15 years ago, when the impact of climate change was not harmful, the study explored the ongoing effects of climate change on the indigenous people of the Rangamati area in Bangladesh. The mean difference, which is 10102.2 with $t = 11.66$, $p = .000$ (two-tailed), indicates a significant decrease in current agricultural income, and the value of Eta squared is 0.73, indicating that there is a large impact of climate change with significant differences in the test scores of current and previous agricultural incomes. Our study also revealed some common consequences of climate change and its effects on croplands and livelihood. Moreover, based on respondents' remarks, the study disclosed the teakwood firming as the principal reason for landslides. The study ended by providing much-needed recommendations for dealing with climate change and insisting on stopping teak plantations to prevent indigenous people from leaving the Rangamati area.

Key Words: Climate change, Teak plantation, Agricultural revenue, Rangamati Area, Indigenous people, Bangladesh.

1. Introduction

Climate change is the environmental impact on the cosmos, and the impact persisted significantly, becoming a matter of concern for everyone, including environmentalists and economists (McMichael et al., 2007). Pervasive climate change badly affects the forest environment and the economic activities we perform to produce goods and services (Teixeira et al., 2013). However, in the Rangamati area, indigenous people, the livelihood of whom depends on crop production, rearing cattle, plowing fish, and plantation of teak trees,

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experience the volatile pattern of nature regarding soil erosion, early and late rain, excessive heat, and scarcity of water (Huda, 2013). Though the plantation of teak trees increased rapidly in the Rangamati area by helping indigenous people generate huge income from the teak plantation, it severely caused severe landslides in the outgoing years (Sirajul Haque et al., 2010). Moreover, teak trees, along with other natural calamities, devastate the prolific firm land, resulting in a scarcity of agricultural grains (Michler et al., 2019). Most integrated Assessment Models (IAMs) include only the consequences of long-term climate change on economic activities but fail to evaluate uncertainty about weather conditions (Kalkuhl & Wenz, 2020). The firm lands of the Rangamati area started shrinking and degrading because of deforestation, soil erosion, floods, and water pollution caused by climate change (Khan et al. l., 2007).

As land in the Rangamati area is very poor due to the deleterious effects of natural hazards, there is a high risk of potential landslides (Islam et al., 2021). Both anthropogenic and natural causes trigger landslides, leading to tremendous loss of properties and lives. For instance, hill cutting, deforestation, and unplanned urbanization are the main anthropogenic causes of landslides, whereas heavy rainfall is a genuine reason for soil erosion (Alam et al. l., 2019). Teak (Tectona grandis L.f.), which is a widely planted hardwood tree in Bangladesh, especially in the Rangamati area, considering its detrimental effects on native forest plants and fertile farmland, caused panic among indigenous people with harmful consequences along with other natural disasters caused by climate change (Abdullah et al. l., 2020). Since climate change triggers a water crisis, people face difficulty producing crops, thus experiencing a shortage of food grains (Ferdous et al. l., 2020). Though a large portion of indigenous people are economically deprived, they can overcome the adverse climatic events in their locality because the government bodies and disaster management authorities are committed to enacting efficient policies to cope with the consequences of climate change (Alam & Ray-Bennett, 2021).

The study aims to analyze the effects of climate change on the current agricultural income of indigenous people living in the Rangamati area. Moreover, showing the comparison between present and previous agricultural incomes to represent the severe outcomes of climate change is the concern of the study. Finally, highlighting the adverse effects of teak plantations on the environment is also a concern of the study. The study is distinct and different from other studies. To commence with, this is the first and foremost focus on the effects of teak plantations and climate change on indigenous people living in the Rangamati area. Though teak plantation results in dangerous land erosion, most scholars are reluctant to pay attention to this widespread problem. Besides, there are fewer studies regarding the ongoing effects of climate change on the revenue of indigenous people. Hence, it is expected that the study's findings will assist government bodies and policymakers in comprehending the miserable condition of indigenous people, thus taking immediate measures to cope with climate change and stop teak firming. Furthermore, the study was conducted by adopting rigorous statistical analysis, which enables us to understand clearly and properly the ongoing effects of climate change and teak trees on the agricultural income of our minorities and their surrounding environment.

2. Literature Review

The consequences of climate change are palpable, as the environment changed and harmed crop production, which in turn caused a shortage of resources (Olesen & Bindi, 2002). Due to climate change's harmful consequences, indigenous communities have trouble producing agricultural goods, thus decreasing their total income (Sen et al., 2021). In the Rangamati area, indigenous people are forced to change their occupations as they cannot maintain their livelihood, which depends on the natural resources being depleted significantly by climate

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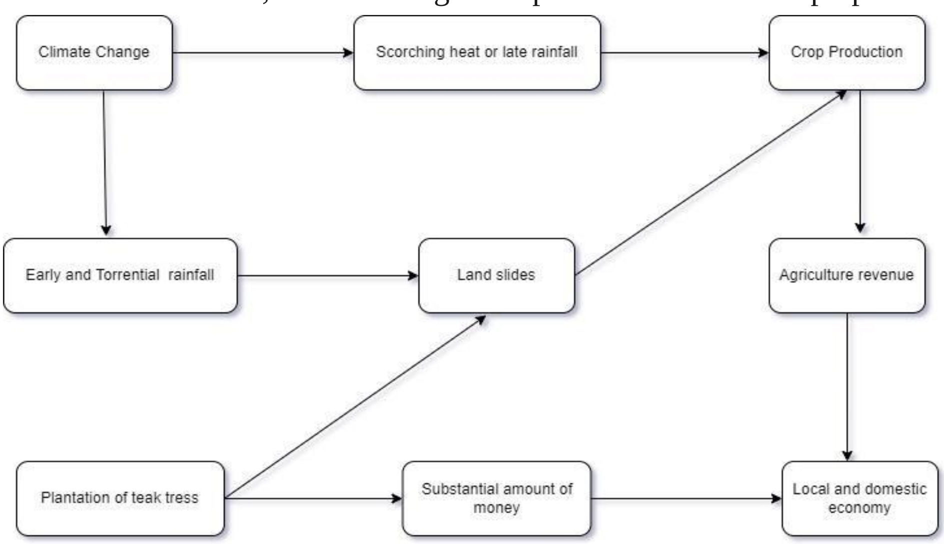
change (Garai et al., 2022). It is a matter of regret that many people started leaving the Rangamati area because their properties were damaged by the severe effects of climate change (Sarwar & Muhibbullah, 2022). The harsh effects of negative pattern patterns, which lead to landslides, heavy rain, and riverbank erosion, promote the migration of people living in hilly regions (Islam et al., 2021). Landslides, one of the severe outcomes of climate change, lead to economic and social losses (Rabby et al., 2022). Although climate change may affect the growth rate of the global economy and may put many people in poverty, the calculation of these impacts remains an elusive task (Tol, 2020).

The consequences of climate change continue to damage agricultural products, resulting in the scarcity of resources in many areas of the world (Peña-Lévano et al., 2019). Adverse nature, which occurs from climate change, has a deleterious impact on the environment, as it mitigates the production of natural grains and causes a shortage in the long run (Rezai et al., 2018). Climate change will surely change the environmental structure in a manner that is likely to jeopardize the environment and breeding grounds of many species (Mamtaz et al., 2018). Teak (Tectona grandis) is the widespread tree hardwood species in the global markets since teak trees play an important role in boosting the domestic and global economy (Deb et al., 2017). In contrast, teak trees, which absorb too much water, make the soil arid, increasing the possibility of soil erosion. Therefore, to reduce dried soil, teak plantations must be reduced or carried out with other trees in scientific approaches. (Abdullah Al Mahmud et al., 2018).

In the Rangamati area, most of the people rely on natural resources, including the plantation of teak trees, which enables them to capture a huge amount of money but is one of the main reasons for soil erosion, which is accompanied by natural calamities reduce crop production indiscriminately (Ruane et al., 2013). Most farmers can not avail of their desired outcome from crop production, which takes the brunt of natural calamities because there is a relationship between agricultural products and climate conditions (Tol, 2012). Any change in climatic events regarding temperature and humidity that control crop production must lead to the devastation of agriculture (Ahmad et all., 2011). Minimum temperature and humidity in Rangamati were found to have an increasing trend along with rainfall, while in other areas, the trend declined slightly over the period (Amin., 2011). Farm forestry, which provides environmental benefits, faces the harsh outcomes of heavy rain, scorching heat, late winter, hailstorm, and soil erosion resulting from climate change (Rasul, 2009).

3. Research model

Based on the literature review, the following conceptual framework was prepared:



4. Research

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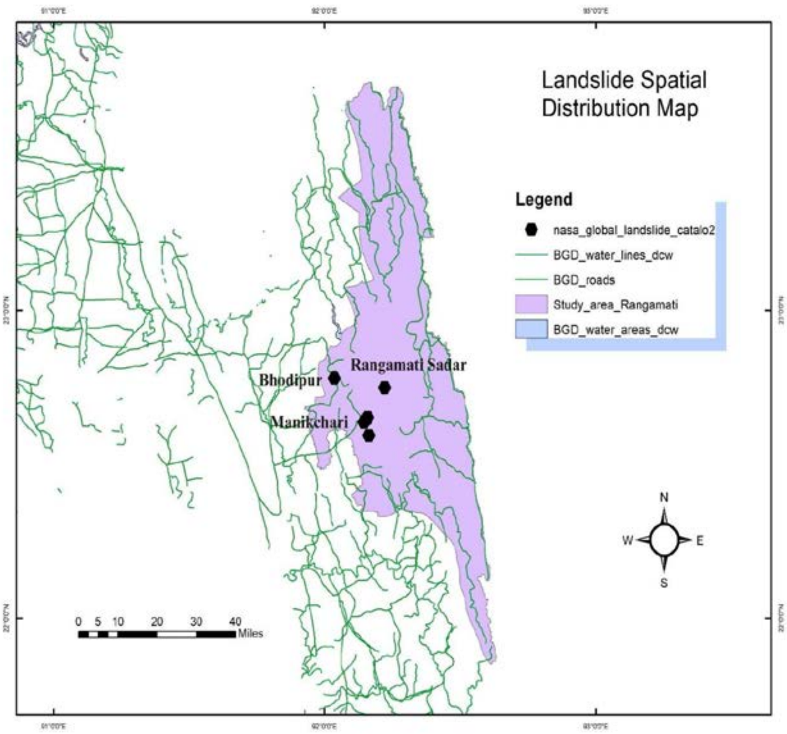
Methodology

Our study area is Rangamati which is 285 kilometers far from the capital of Bangladesh. We selected 50 households and asked about their current and previous agricultural incomes (10-15 years ago). We first collected their agricultural income 10-15 years ago and finally compared their previous and present agricultural incomes. Using **SPSS** software, we adopted **Paired Samples T-Test** to show the significant change in the average current revenue from the agriculture sector. After that, we used the Eta **squared** formula to measure the actual effects of climate change on current agricultural income. We also asked respondents about what and how the consequences of climate change damage their croplands. With the help of **Microsoft Excel,** we plotted diagrams to highlight the consequences of climate change. **GIS** software was also used to highlight the study area and detect landslides caused by teakwood firming. It is essential to mention that our respondents don't plant teak because their land is limited, and they also understand the severe effects of teak. Still, they are sufferers due to other residents who have a considerable quantity of inherited land to plant teak trees.

5.Study Area



Rangamati is located on the southeastern side of Bangladesh. Most of the people living in the Rangamati area depend on natural resources. In recent times, teak plantation, which ruins soil structure, increased rapidly along with volatile weather patterns. Torrential rain, scorching heat, and scarcity of water devastate croplands. Undoubtedly, teak, along with heavy rain, cause severe landslides, compelling residents, who depend on agriculture with limited land, to leave the Rangamati area. In the outgoing years, Rangamati residents experienced dangerous landslides, which not only wrecked croplands but also took the lives of human beings. Overall, the residents of the Rangamati area are in dire consequences because of climate change and pervasive teak farming.

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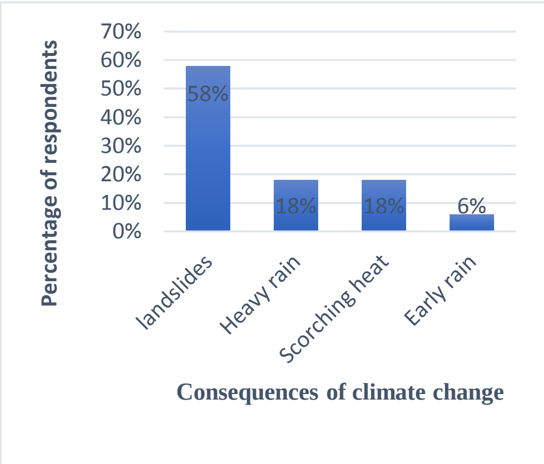
6. Result and Analysis

Table 1: Profile of respondents

Amount of land (in acres)	**Frequency**
1 acre	15
1-2 acres	14
2-3 acres	11
3 acres	10
Tending to leave the Rangamati area	
Yes	27
No	15
Maybe	8
Other sources of agricultural income	
Breeding livestock	16
Plowing fish	8
Depending on crop production	26

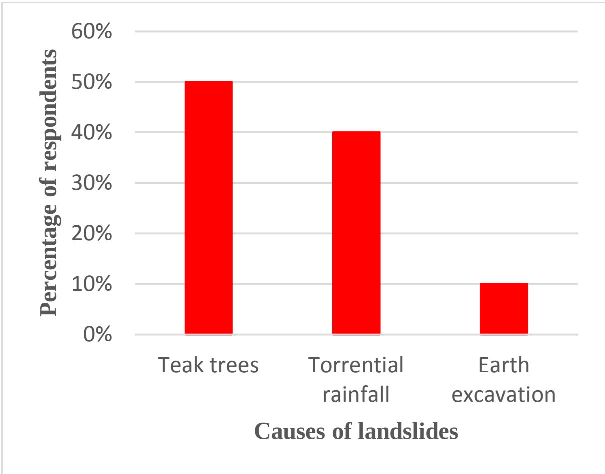
Table 1 represents the total amount of land of respondents. It is observed that most of the respondents rely on crop production, and the amount of land is not more than 3 acres. The total amount of land varies from 1 acre to 3 acres, whereas most respondents tend to leave the Rangamati area. Besides, few respondents were involved in rearing cattle and plowing fish.

Figure 1



Source of the Data: Field Work

Figure 2

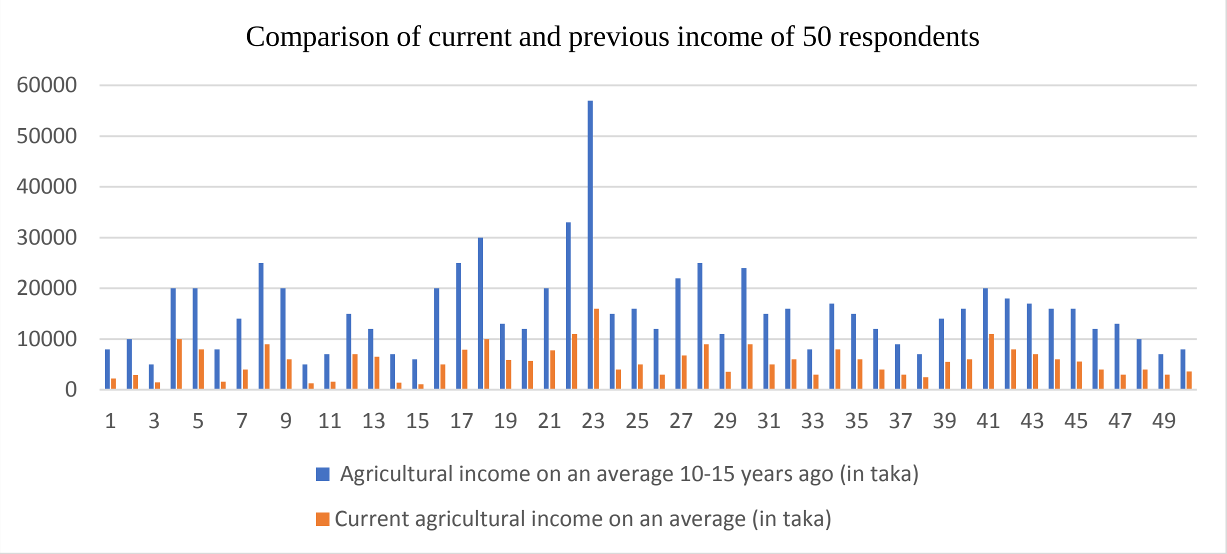


Source of the Data: Field Work

Figure 1 indicates the percentage of respondents whose crops were severely affected by the consequences of climate change. Crops of 58% of respondents were damaged by landslides, whereas both heavy rain and scorching heat devastated agriculture of an equal percentage (18%) of households. Only 6% of households faced difficulty in the agriculture sector because of early rain.

Figure 2 illustrates the three reasons for landslides highlighted by responded households. 50% of households claimed that the plantation of teak trees was the foremost reason for landslides which destructed their agricultural grains severely. Moreover, 40% and 10% of households remarked that torrential rain caused by climate change and earth excavation by human beings was also responsible for landslides.

Figure 3



Source of Data: Field Work

Figure 3 depicts the current and previous agricultural income of respondents. According to the figure, there is a vast distinction between their current and previous income, as current income declined dramatically due to the severe effects of climate change on agricultural grains.

Table 2: Paired samples statistics

		Mean	N	Std. Deviation	Std. Error
Pair 1	Previous income	15660.0000	50	8786.84081	1242.64694
	Current income	5557.8000	50	3076.36500	435.06371

Table 2 illustrates paired sample statistics where the average means, standard deviation, and standard error in current and previous agricultural incomes are obtained. It is observed that the previous mean income is higher than the current mean income.

Table 3: Paired Samples T-Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Previous income – current income	10102.20000	6128.87421	866.75370	8360.39322	11844.00678	11.655	49	.000

Table 3 indicates how much significant change took place in current agricultural income due to the severe effects of ongoing climate change. We see current average agricultural revenue dropped significantly (M= 5557.8; SD= 3076.365 for current agricultural income and M=

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15660; SD= 8786.84081 for previous agricultural income are shown in **Table 2**). The mean decrease of current agricultural income in test scores, which is 10102.20000 with t= 11.66; p= .000 (two-tailed); and a 95% confidence interval ranging from 8360.39322 to 11844.01, indicates the substantial effects of climate change on the income of indigenous people.
However, the results can't measure effect size statistics. For doing so, **Eta squared** formula is used the most.

The following formula is used for Eta squared:

$$\text{Eta squared} = \frac{\square^2}{\square^2+(\square-2)}$$

Here, t, which is discussed in **Table 3**, refers to the t statistic, and N is the sample size or the number of responses.

$$\text{Eta squared} = \frac{(11{\cdot}66)^2}{(11{\cdot}66)^2+(50-1)}$$

$$\text{Eta squared} = \frac{135{\cdot}96}{135{\cdot}96+49}$$

$$\text{Eta squared} = 0.73$$

The guidelines **(proposed by Cohen 1998, pp 284-7)** for interpreting this value are 0.01 = small effect, 0.06 = moderate effect and 0.14 = large effect.
In our calculation, the value of eta squared is 0.73 > 0.14. Therefore, we can conclude that there is a large effect with substantial differences in the test scores of current and previous agricultural incomes.

7. Findings

This paper found out the ongoing effects of climate change on the agricultural income of indigenous people living in the Rangamati area. Besides, most of the respondents opined that teak is the main reason for landslides. From figure 1, it is observed that landslides are the first and foremost reasons for destroying croplands, as 58% of respondents were ravaged by landslides. Agricultural grains of an equal percentage (18%) of responded people had been devastated by heavy rain and scorching heat, respectively. Early rain also caused damage to 6% of firm lands. Therefore, the current agricultural income of indigenous people declined ironically. Figure 2 discloses the three factors of landslides. It is seen that teak trees cause landslides the most, as 50% of households claimed that the plantation of teak trees was the foremost reason for landslides. Earth excavation had little impact on landslides. Only 10% of responded families claimed that earth excavation led to landslides. Since earth excavation takes place in legal ways and according to the rules and regulations of government bodies, it does not lead to remarkable damage to firm lands. Heavy rainfall also resulted in landslides remarkably because 40% of responded households opined that torrential rain triggered severe landslides. The study investigated that the current average agricultural income dropped significantly, as P= .000<0.05 (two-tailed) with a 95% confidence interval ranging from 8360.39322 to 11844.01 signaled a perfect significance level. Finally, the value of Eta squared calculated using the t value (11.655) was 0.73. Since 0.73 was larger than 0.14 (accounting for a large effect), it was wise to remark that a large effect existed with substantial differences in the test scores of current and previous agricultural incomes.
The study obtained ample evidence to support the effects of climate change on the agricultural revenue of indigenous people, and teakwood farming on the soil. Garai et al., 2022 conducted a study on the Rangamati area and identified that indigenous people are inclined to leave their inheritance land because they have slight access to the natural resources which were devastated by climate change. Abdullah et al. l., 2020 investigated a study on the process of teak plantation in the Rangamati area, which asserted that the way

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teak is planted by undermining its negative effects destructs forest plants and farmland. In the Rangamati area, indigenous people earn their livelihood depending on natural resources and the plantation of teak trees which is a source of generating income but causes landslides (Ruane et al., 2013). However, the study contradicted the results of Bailey & Harjanto, 2005, which indicated that teak plantation has slight adverse effects, especially when it comes to the advantages and disadvantages of teak firming. The study also contradicted the findings of Griess & Knoke, 2011, which paid the importance of teak plantation for economic benefits, but there was no sign of environmental concern. Last but not least, the study coincided with the findings of West et al., 2009, which highlighted that the effects of climate change on natural resources are serious, and effective measures, as well as efficient management, are required to tackle the consequences of climate change.

8. Limitations and scope for further research

This paper is limited to indigenous people living in the Rangamati area. It was very much difficult for us to find out more than 50 households without teak farming because numerous residents, whose livelihood is dependent on natural resources and grains with a limited amount of land, had foregone the Rangamati area. We also heard that some of them tried to settle in Rangamati's main city because their croplands were destroyed by landslides and climate change. That's why we had a small sample size (50). Additionally, we showed teak plantation as the prime cause of landslides according to the remarks provided by our respondents, but no statistical analysis was adopted to indicate whether teak firming has significant effects on soil erosion or not. However, in our study, we perfectly experimented with the serious effects of ongoing climate change on the agricultural revenue of indigenous people who rely on agricultural farming but don't plant teak. Therefore, we realize our study will have vast scope for other scholars to conduct their research on the present economic and social conditions of indigenous people who live not only in the Rangamati area but also in other hilly regions.

9. Conclusions and Implications

The study aimed to highlight the ongoing consequences of climate change on the agricultural revenue of indigenous people while focusing on the effects of teak on fertile land. With rigorous statistical analysis, the study found the significant effects of climate change on the revenue of indigenous people. There was a significant reduction in the average current income of responded families, indicating that climate change severely affected them. In the Rangamati area, indigenous people face difficulty in having their desired outcome in the agriculture sector because of the terrible consequences of climate change. Many residents of the Rangamati area resort to a teak plantation which is the source of a huge amount of money but erodes fertile land. As a result, the land's condition is too poor, resulting in landslides. It is a matter of regret that the teak plantation increased dramatically, which along with climate change, still provides a devastating blow to firm lands. During the survey, we were very shocked after hearing that people, who depend on natural resources, forewent to the Rangamati area because their total amount of land had been shrunk by landslides, early and late rain, and scarcity of water. The study proved the adverse effects of climate change on our minorities' income. Therefore, the findings of the study may encourage government bodies and policymakers to take immediate action to cope with climate change and create awareness about the serious effects of teak plantations on the soil. Though teak plantation is a source of earning money to promote our economy, it erodes soil. Following the results of the study, the government may prevent people from planting teak in an attempt to reduce landslides and motivate people to adhere to crop production without harming the environment. First, the government must provide compensation and subsidies to the sufferers of climate change and teak farming. Finally, the findings of our study may push the government to adopt more climate-resilient policies following the advice of national and international organizations for protecting our indigenous people from natural disasters. Considering the current condition of indigenous people, especially those who are reliant on natural resources, government bodies must respond and pay full attention as early as possible. Otherwise, indigenous people's dire and miserable lifestyle will affect Bangladesh socially, culturally, and economically.

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Appendix

Number of families	Yearly agricultural income on an average 10-15 years ago (in taka)	Yearly current agricultural income on an average (in taka)	Plantation of teak
1	8000	2200	No
2	10000	2900	No
3	5000	1500	No
4	20000	10000	No
5	20000	8000	No
6	8000	1600	No
7	14000	4000	No
8	25000	9000	No
9	20000	6000	No
10	5000	1300	No
11	7000	1600	No
(Continued) 12	15000	7000	No
13	12000	6500	No
14	7000	1400	No
15	6000	1100	No
16	20000	5000	No
17	25000	7900	No
18	30000	10000	No
19	13000	5900	No
20	12000	5700	No
21	20000	7800	No
22	33000	11000	No

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23	57000	16000	No
24	15000	4000	No
25	16000	5000	No
26	12000	3000	No
27	22000	6750	No
28	25000	9000	No
29	11000	3540	No
30	24000	9000	No
31	15000	5000	No
32	16000	6000	No
33	8000	3000	No
34	17000	8000	No
35	15000	6000	No
36	12000	4000	No
37	9000	3000	No
38	7000	2500	No
39	14000	5500	No
40	16000	6000	No
41	20000	11000	No
42	18000	8000	No
43	17000	7000	No
44	16000	6000	No
45	16000	5600	No
46	12000	4000	No
47	13000	3000	No
48	10000	4000	No
49	7000	3000	No
50	8000	3600	No

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Organizational Learning Orientation and its Impact on Organizational Agility: A Study in the Indian Context

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Abstract

The external environment in which organizations operate is characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). The post-pandemic scenario has shifted from VUCA to a BANI world **(**Brittle, Anxious, Nonlinear, and Incomprehensible). Organizations face various challenging scenarios, most of which are unpredictable. To retain competitive edge organizations need to be nimble and swift in performance outcomes to retain a competitive edge. Organizations that are learning-oriented and agile have a competitive edge in pursuing success. This paper studies Organizational Learning Orientation and its Impact on Organizational Agility in the Indian Context. A questionnaire adopted from previous literature was used to test the research hypothesis, and a total of 114 responses were analyzed using correlation and regression analysis. The results of the study indicated that organizations that are learning-oriented with an emphasis on "learning commitment," "open-mindedness," and "shared vision" are positively associated with organizational agility.

Keywords: Organizational learning orientation, learning commitment, open-mindedness, shared vision, organizational agility

Introduction

Today's business environment necessitates that organizations are proactive and adaptive in their approach to achieving business outcomes. Organizations today face a continuous onslaught of changes in the marketplace coupled with commitments towards ESG (environmental, social, and governance) issues. Gligor, Esmark, & Holcomb (2015) state that to survive and outperform amid turbulent market conditions, organizational agility facilitates achieving business results amid various tumultuous market forces. Organizational learning plays a vital role in helping an organization to reflect and adapt to the external environment constantly.

Literature Review

This paper adopts the approach of Sinkula, Baker, & Noordewier (1997), wherein learning orientation is considered a value by the company, which is proliferated across the organization. This impacts the organization's ability to create and utilize knowledge (Sinkula et al., 1997). As per Eisenhardt & Martin (2000), organizational learning orientation may be defined as an organization's capabilities that provide the competencies to help a company navigate various external environmental challenges. Organizational learning orientation is an antecedent of organizational agility (Braunscheidel & Suresh, 2009). As per Sinkula et al. (1997), an organization with learning orientation can be described based on the following three dimensions:

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a) Learning commitment
b) “open-mindedness”
c) “shared vision”

Learning Commitment (LC)
Braunscheidel & Suresh (2009) opine that organizations that are oriented towards learning are better organized internally with their processes and also reflected in their customer service abilities. Braunscheidel et al. (2009) further infer that such organizations constantly work on accelerating their ability to meet and exceed customer expectations. Thus, an organization committed to learning studies proactively, reflects and acts on information and knowledge that impact the organization internally and externally (Dukeov, Bergman, Heilmann, & Nasledov, 2020). As per Crossan, Lane, & White (1999), learning happens through two methods - the employee learns and shares that with the organization (“feed-forward”), and the learning from the organization to the employee (“feedback”). Dixon (1992) states that organizations that constantly explore different ways of business delivery display a more excellent orientation towards learning. In the Indian context, there is limited research on the direct impact of learning orientation on organizational agility. As per Calantone, Cavusgil, & Zhao (2002), learning oriented organisations urge their employees to accelerate emphasis on learning often beyond their work profile requirements. Thus the following hypothesis is proposed :
H1-a : Learning Commitment and organizational agility are positively associated with each other.

“Open-Mindedness” (OM)
Sinkula, et. al. (1997) state that companies which introspect on their various conventions, norms that are habitual aspects in their way of working are essentially making efforts to unlearn and creating opportunities for being open-minded. Organizations all too often dwell on past successes to be replicated for the future and it merits to habitually question this notion. As the years go by, the organization's efficient goals are no longer valid, and the organization needs to be open-minded to accept this reality (Senge, 1990). Based on the above, the proposed hypothesis is as follows :
H1-b : Open-mindedness and organizational agility are positively associated with each other.

Shared Vision (SV)
“Shared vision” is like an anchor and forms the core of learning proactively by employees as it shows the organization path to employees, (Day, 1994). In the absence of SV employees will lack alignment and also be unclear on key performance indicators being focussed by the organization, (Sinkula, et. al. 1997). Thus the following hypothesis is proposed:
H1-c: Shared vision and organizational agility are positively associated.
Combining the three elements of Organizational learning orientation, the following hypothesis is proposed:
H1-d: Organization learning orientation (combination of the three dimensions, i.e., LC, OM and SV) and organizational agility are positively associated with each other.

Organizational Agility (OA)
The term Organizational Agility was initially propagated in the “Iacocca Agency report” in 1991. Thereafter there were research studies on the concept initially in the manufacturing sector, and then progressing to other industries. As per Zhang & Sharifi (2000), OA is a capability and consists of the following elements:

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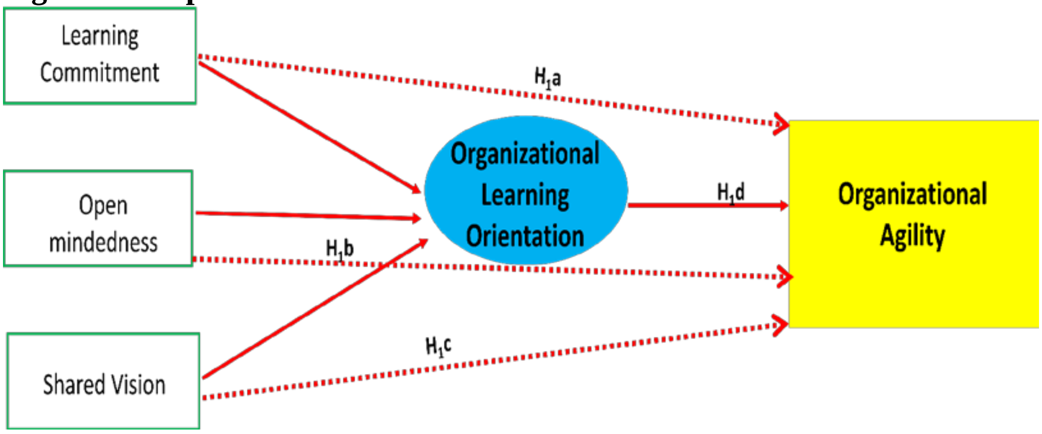
- Speed
- Responsiveness
- Flexibility, and
- Competency

"Speed" is about being able to achieve results in the minimum time possible. "Responsiveness" is about being adept at responding to changing business scenarios. "Flexibility" is the ability to bring out nimbleness in business operations based on changing customer requirements. "Competence" is the ability to achieve the goals of the organization while being efficient in achieving performance outcomes. OA provides a competitive edge and facilitates organisational performance. OA can be viewed as a trait that helps organizations to navigate external business challenges.

Figure 1: Proposed Research Model



Research Methodology

The purpose of this study is to understand the impact of Organizational Learning Orientation on OA and the research objectives are as follows:

To study the impact of:

- learning commitment on organizational agility
- open-mindedness on organizational agility
- shared vision on organizational agility.
- organization learning orientation (combination of the 3 dimensions *i.e, LC, OM and SV*) on OA.

Mixed method research was used to conduct this research. In-depth interviews of six senior managers was conducted on this topic. Based on the findings from the in-depth interviews, a questionnaire was prepared for the pilot survey. Based on the feedback of the pilot survey, a final questionnaire was prepared for the survey. The questionnaire survey method was used for this study.

Sample

A sample of 150 respondents was selected through convenience sampling and they responded to a hardcopy questionnaire that was distributed at a Conference that included employees from multiple industries. Respondents included employees designated as 'Manager and above' with a minimum of five years of work experience from metro cities across India (e.g.

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Delhi, Kolkata, Chennai, Mumbai, Jaipur, Patna, Bangalore, etc) and covered industries like FMCG, Fintech, Manufacturing, ITES, Agri sector, etc. The type of companies included a mix of traditional manufacturing companies, service industries, large companies, small and medium (SME), and a mix of Indian and Multinational companies. The total number of completed questionnaires received was 119 with 5 questionnaires being excluded due to missing responses.

Research instrument

The items in the questionnaire were measured on a 5-point Likert scale with 1 being "strongly disagree", 3 as 'Neither Agree nor Disagree' and 5 as "Strongly Agree". Research instruments from previous literature were adopted for this study. The research instrument created by Zhang & Sharifi (2000), was used to measure Organizational Agility. Organizational learning was measured based on a research instrument by Sinkula, et. al. (1997)

Data Analysis

SPSS Version 14 was used to run the correlation and regression analysis for this study. The Model Summary is as follows:

The table highlights the R and R^2 value. R-value illustrates the "simple correlation" which is .874 which denotes a high degree of correlation. The R^2 illustrates the variation in the dependent variable "organizational agility" which can be explained by the independent variable, "Organizational learning", which is 0.764 which is large.

Table – 1 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874(a)	.764	.762	.43533

a Predictors: (Constant), Organizational Learning

Table – 2a : Correlations

		Commitment to learning	Organizational Agility
Commitment to learning	Pearson Correlation	1	.691(**)
	Sig. (2-tailed)		.000
	N	119	119
Organizational Agility	Pearson Correlation	.691(**)	1
	Sig. (2-tailed)	.000	
	N	119	119

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

Table – 2b : Correlations

		Shared vision	Organizational Agility
Shared vision	Pearson Correlation	1	.889(**)
	Sig. (2-tailed)		.000
	N	119	119

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Organizational Agility	Pearson Correlation	.889(**)	1
	Sig. (2-tailed)	.000	
	N	119	119

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

Table – 2c : Correlations

		Open-mindedness	Organizational Agility
Open-mindedness	Pearson Correlation	1	.968(**)
	Sig. (2-tailed)		.000
	N	119	119
Organizational Agility	Pearson Correlation	.968(**)	1
	Sig. (2-tailed)	.000	
	N	119	119

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

Table – 2d : Correlations

		Organizational Learning	Organizational Agility
Organizational Learning	Pearson Correlation	1	.874(**)
	Sig. (2-tailed)		.000
	N	119	119
Organizational Agility	Pearson Correlation	.874(**)	1
	Sig. (2-tailed)	.000	
	N	119	119

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

The ANOVA table, demonstrated the suitability of the "regression equation"

Table – 3 : ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.827	1	71.827	379.020	.000(a)
	Residual	22.173	117	.190		
	Total	94.000	118			

a Predictors: (Constant), Organizational Learning
b Dependent Variable: Organizational Agility

The model can predict the dependent variable appropriately. The Sig column above is less than 0.05, demonstrating that the regression model is "statistically significant" and is a good fit. The above table shows that a strong positive relationship between "Organizational

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Learning" and "Organizational Agility" exists. The three sub-dimensions of OL, constituting commitment to learning, shared vision, and open-mindedness, also indicate a positive relationship with OA. All the P values are less than 0.05, so we reject the null and accept the alternate hypothesis. We can say that the model is statistically significant.

Discussion/Conclusions

The results of the study indicated that organizations that are learning-oriented with an emphasis on "learning commitment", "open-mindedness" and "shared vision" exhibit organizational agility, as confirmed by the outcomes of the survey.

Implications – Research & Practical

This research paper has insights for managers and leaders as they navigate external environmental challenges. Usually, there is a tendency to view learning expenses as a cost rather than an investment. Apart from the short-term emphasis, managers must focus on medium and long-term survival and growth, and agility is imperative for organizations to thrive. An organization should relentlessly nurture a culture towards learning as skill and technology redundancy of employees will ultimately lead to outdated organizations. Outdated employees will be unable to comprehend the VUCA or BANI world and incapable of handling these changes. Organizational learning orientation can be a crucial differentiator and a competitive advantage for an organization to survive, thrive and accelerate in the VUCA or BANI world.

Limitations of the Study

The questionnaire responses have been treated as one whole group and not segregated into industry types.

Future Research

Future research could include a large-scale survey segregating the responses into industry types. Future research can also focus on case studies of companies that closed down or have been negatively impacted due to the VUCA or BANI world. The questions that may be addressed include whether the lack of organizational learning culture was one of the underlying reasons for their inability to handle the VUCA / BANI world. There may be inherent issues such as corporate governance, technological disruptions, organizational inertia due to bureaucratic setup, lack of capital funding to invest in technological changes, or unforeseen socio-economic-political-cultural issues of MNCs fitting into foreign countries, which may be the emphasis of future research.

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The Impact of Servant Leadership Style in managing Business Agility and Sustainability in Hotel Industry

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Abstract

Purpose
The purpose of the paper is to understand the working of servant leadership style in managing business agility in the hotel industry and to learn if it works in sustaining employees by using qualitative analysis.

Literature review
From several literature reviews, servant leadership style has been considered as one of the most significant topics of learning and exploring, mainly at the time of managing crises. The recent incidents of pandemic have made the hotel industry fragile and dredged it into huge losses. Therefore, this study focuses on exploring the aspects of servant leadership style and its relevance today's changing business landscape.

Research Methodology
In-depth interviews were conducted with 10 participants from selected hotels in Baroda. The study identified themes and constructs that confirm the impact of adopting servant leadership style to manage the crisis in the hotels.

Findings
The findings are important for understanding the role of leaders to manage business in crisis, effectively. Servant Leadership style has a huge impact on employees working at middle level management relative to employees who newly joined the organization at front office level.

Keywords: Servant Leadership, Pandemic, Hotels industry, Business Agility.

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Impact of Ethical Digital Marketing on Consumer Purchase Decision

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Abstract
Increasingly, more businesses are using digital marketing to attract consumers to their products and services. This study tries to determine how consumers view the ethics of digital marketing. Fictional Advertisements, Social Advertisements, and Surrogate Advertisements are the three elements impacting Consumer Purchase Decisions that this study focuses on. A customized structured questionnaire is used to collect data. The total of 280 students from various cities were given five-point Likert scales. This survey also demonstrates whether or not people care about purchasing ethically. Surrogate Advertisements are currently seen as an important trend in the marketing industry. The findings indicate that Fictional Advertisements, Social Advertisements and Surrogate Advertisements have an effect on Consumer Purchase Decisions, and they also illustrate the importance of truth, social responsibility, and human dignity in marketing. More research is needed to find out and understand how the other factors affect Consumer Purchase Decisions.

Keywords: Digital Marketing, Ethical Marketing, Consumer Behaviour, Purchase Decision

INTRODUCTION
The success of businesses and the economy now depends entirely on advertising in the era of digital marketing. The main goal of digital marketing is to create new associations, ideas, and awareness about a product. There are many different marketing tools, but digital advertising stands out because it has the biggest impact on consumers' opinions of what they should buy. (Abideen and Saleem, 2011) Advertising is a part of the promotional mix and is used to promote brand awareness or as a means of communication to sway consumers' purchasing decisions. The character of the product is intended to be impacted by digital marketing as its main goal. Nevertheless, the majority of people's memories change or amplify the significance of this indicator. (Davari & Strutton, 2014) The company's name is represented by several elements in the logo. These barriers obstruct consideration, evaluation, and, ultimately, purchase. The advertising sector has grown tremendously in size as a result of considerable developments in media, technology, and communication methods. (Holtzhausen and Zerfass, 2014) There are many beneficial consequences of advertising on society, but as we are all aware, there are also unethical tactics that may be engaged in. (Tsalikis and Fritzsche, 2013). Advertising is described as a compensated form of impersonal communication of goods, concepts, or services offered by a sponsor who has been acknowledged. Since the problems surrounding marketing ethics and social responsibility are so complex and call for so many different viewpoints, they are difficult for marketing efforts to understand and take years of research to fully grasp. Advertising is essential in order to increase public awareness. (Fennis and Stroebe, 2015) Additionally, advertising help develop countries' economies. The earliest signs and inscriptions were placed on the walls of famous buildings. Sadly, advertising picked up speed, growing to be a medium-sized player in the first half of the nineteenth century and becoming more successful in a setting that had never been seen before in the twentieth century: television. (Smith, 2011). The internet is one of the biggest and most important global promotional markets due to its size. The rise of the internet

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has put an end to the electronic age, all the changes to daily life and the way that consumers connect and make purchases. (Chen et al., 2011) Digital advertising has, as expected, grown to be a substantial source of consumer information. With sales that are nearly three times higher than total retail sales, the internet is the segment of the retail business that is expanding the fastest. Due to its growing popularity, the internet seems to be the web client of the future, despite the current financial crisis and other global restrictions. (Darley et al., 2010) The digital coupons were being collected and created online by an increasing number of individuals. stating that clients may get online receipts in a variety of formats, including theatre, restaurant, and food. Digital advertising has grown in popularity around the globe in the 20th century. (Grewal et. al., 2018) Digital advertising will develop further and become a more comprehensive representation of newcomers and marketing. For the first time, luxury goods are being purchased online. People are now able to shop at stores thanks to information. For the first time, expensive goods can be bought online. Computers, cameras, etc., are a few examples. (Lieb, 2012). But more and more people in developing countries are buying their own food supplies. Since coffee beverages may stimulate customer reaction and hasten the process, the firm has used the display to advertise magazines for over ten years. The social responsibility of marketing has not been clearly described, according to a number of studies conducted over the past 30 years or more. The advancement of marketing ethics and community involvement is the responsibility of several institutions and organizations. (Fitzgerald et. al., 2016) In the market, commercialization and reaction capacity are predicted. There is always a certain dysfunction that arises, and it is also said that consumers would want to buy fair items over unethical ones. Because ethical behavior boosts sales and improves how customers perceive businesses, markets act ethically. Without advertising, the variety of products would be much smaller, and most goods would not sell as well as they do now. (Dibb and Carrigan, 2013) Advertising is completely moral, but certain activities are not. If you want to keep your customers over the long term, make sure your advertising improves the user experience rather than detracts from it. (Kumar and Gupta, 2016) This study is grounded in a theory that is used to look at the relationship between different factors. The conclusion and the outcomes were then presented. The study's restrictions were discussed last. The goals of this study are to evaluate how ethics affects behavioral elements and the influence of digital marketing on customer purchasing decisions.

LITERATURE REVIEW

The Internet is analyzing essential assets to acquire a competitive edge as a result of the rapid expansion of online technologies. Marketing encompasses more than just advertising. However, promotion is seen as an essential part of marketing. By analyzing numerous aspects of online advertising, several academics may investigate customers' purchasing intentions. (Krizanova et. al., 2019) Internet reviews and consumer purchase patterns have a positive association. A person's shopping preferences might be influenced by personal, social, cultural, and psychological factors. The marketing environment places a lot of attention on gender. Age affects purchase decisions significantly. The rate of spending is inversely related to income. (Leeflang et. al., 2014) Digital users dislike banner, pop-up, and pop-under ads because they are intrusive. Since customer quality and the desire to pay are correlated, customer loyalty is crucial to a company's success. (West et. al., 2015) Understanding unethical advertising techniques and how consumers perceive them is essential. Consumers assess advertisements from three different angles: relativism, pragmatism, and idealism. Assuming idealism to be the universal declaration of good and evil, consumers assess the morality of all advertising as a whole. (Munjal, 2016) Furthermore, pragmatism bases its decisions on the time period, culture, and target market of the advertisement and does not hold the entire cosmos to be right or wrong. One culture could tolerate it, but the majority of

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others might reject it. The main difference between idealism and pragmatism is that in idealism, a statement is accepted or rejected as a whole, while in pragmatism, a statement is not accepted as a whole and may change from culture to culture, as well as depending on the time and audience. (Plaisance et. al. 2012) We place a premium on marketing strategies that address this problem all the way up to the point of sale. Due to information on the company's active and active ethical behavior, providers are pushed to behave ethically. Sales of consumer goods and services are affected. Although it would seem that consumers favor businesses that support nonprofits, this is not the case. (Brunk, 2010). Because of Nestlé and Exxon's actions, it is now impossible to tell if a company's owners are also its employees or whether it engages in immoral business activities. According to preliminary studies, poor information affects how clients view better data. More and more purchases are being made by people who want to become involved in their communities. (Basgoze, 2012) For a number of reasons, online advertising systems pose a serious threat to traditional strategies. Prior to reducing the economic impact of cultural mediators like advertising, one should first increase the effectiveness of the sellers and suppliers who acquire and communicate the advertising messages to consumers. New content sources were added in 2000 by websites like YouTube, social networking sites like Facebook, and blogs like Huffington Post. According to Bauer (2011), this has increased the availability of advertisements and is projected to reduce the revitalization of the media in commercials, hence lowering the quality of the media. Increasing the effectiveness of advertising may increase or decrease demand for advertising, which may have some impact on pricing. Thirdly, the ability to go back to online advertising encourages traditional media like Yahoo! and MSN to develop more Internet types that customers may use to improve their brand's overall image. (Lamey et. al., 2012) Additionally, viewers leave websites to obtain Internet media because, like with radio and television, they prefer content that is distinct, uncomplicated, flexible, and of a reasonable size. Radio and newspapers seem to have been supplanted by consumers, but not television. According to how actively consumers participate in the community, their purchasing power will rise. A company that supports a cause that is significant to the community is seen favorably, and people assume that it will likely offer a variety of goods and services. (Deshwal, 2016) Brand associations are characteristics that people use at different times and with different signals to recall the brand. Visual, aural, and textual inputs all have a beneficial relationship with emotional responses. Individual perception, which is a subjective opinion and not an attitude, is the source of beliefs and norms, which are elements of environmental attitudes. The environment does not provide a distinctive customer experience, despite market research showing that it does produce a distinct consumer experience that is exploited in the creation and marketing of goods and services. (Schreuder et. al., 2017) The purpose of the purchase suggests that the customer made the purchase without careful consideration or planning. A consumer lifestyle purchase is a favorable response to the items and reflects the buyer's behavior. Environmental psychology, however, offers useful insights into emotional responses in contrast to traditional cultural analysis. (Pradeep, 2010). The focus of local psychology is on the importance of knowledge and emotional characteristics. The senses of touch, sight, and sound might affect the user's experience. Data prices may have an influence on how advertising data is used. As a result, there is a connection between the music, the photos, and the video. The local brain type suggests that environments like shopping malls might cause emotional sensory disturbances, excitement, or the ability to control different types of acquisition. (Shahzad et. al., 2018) When a person makes clear what he wants, the need is recognized. The second stage involves the time when a customer wants to learn more about a good or service. Internal and external sources of information are available for a desired good or service. Information that can be found from internal sources, such as social media, television, etc., is referred to as internal information. Information that can be found

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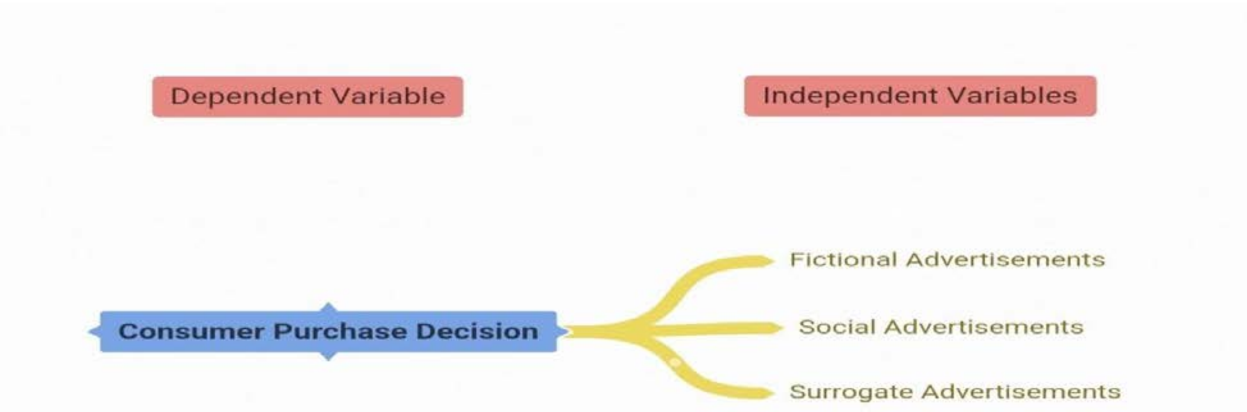
from external sources, such as social media, television, etc., is referred to as "external information." (Kietzmann et al., 2011) The third step of the purchasing process, which is regarded as one of the most crucial, is evaluating potential choices. At this point, the customer considers the product's quality, price, and other factors. Because the next step includes making a buying decision, traction is necessary at this level. (Alamgir et. al., 2011) Although many writers feel the fifth and final stage, which deals with customer input, to be just as important as the previous four, they frequently leave it out. Consumer purchase behavior analyses the factors that lead customers to behave a certain way in spite of differences in their environment. The ability of consumers to recall a brand is known as an "emotional reaction," which is closely connected to advertising. (Javadi et. al., 2012)

RESEARCH METHODOLOGY



Statistical techniques, such as Pearson correlation and regression analysis, are applied to data using SPSS in order to evaluate the relationship and determine the influence of ethical considerations on customer purchase decisions. On the basis of the accessibility and availability of data collection, the convenience sampling strategy was used. A questionnaire on a 5-point Likert scale received responses from a total of 280 students from different cities. Regression analysis and Pearson's correlation were utilized to assess the reliability of this study's findings. The respondent's age and gender are two of the demographic questions asked in one section of the questionnaire. A nominal scale was used to evaluate this section of the survey. The second part provides details on the research's variables. The fictional advertisements, social advertisements, and substitute advertisements make up the independent variables. Consumer purchase decisions are measured across many domains.

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DATA ANALYSIS & RESULTS

Table 1 - Descriptive Statistics

Variables	Mean	SD
Age	2.467807	0.890757
Gender	1.413743	0.991167
Education	2.143497	0.876645
Fictional Advertisements	2.143497	0.876645
Social Advertisements	3.689789	0.936541
Surrogate Advertisements	2.769291	0.989498
Consumer Purchase Decision	3.547522	0.830782

The above table shows that the mean and standard deviations, Social Advertisements were mean 3.689789 and the standard deviations 0.936541, Surrogate Advertisements were mean 2.769291 and standard deviation 0.989498, Fictional Advertisements were mean 2.143497 and standard deviation 0.72769, Consumer Purchase Decision were mean 3.547522 and standard deviation 0.830782, Gender were mean 1.413743 and standard deviation 0.991167, Age were mean 2.467807 and standard deviation 0.890757, and lastly the Education were mean 2.143497 and standard deviation 0.991167.

Table 2 - Pearson Correlation Values

Variables	Fictional Advertisements	Social Advertisements	Surrogate Advertisements	Consumer Purchase Decision
Fictional Advertisements	1			
Social Advertisements	-0.122	1		
Surrogate Advertisements	0.083	0.051	1	
Consumer Purchase Decision	-0.081	0.228	0.076	1

The above table shows the Pearson Correlation Value Fictional Advertisements and Consumer Purchase Decision (r=-0.081 & p=0.000), this indicates that there is a negative correlation between Fictional Advertisements and Consumer Purchase Decision, for Social Advertisements and Consumer Purchase Decision (r=0.028 & p=0.000), this indicates that there is a positive correlation between Social Advertisements and Consumer Purchase Decision and last for the Surrogate Advertisements and Consumer Purchase Decision (r=0.076 & p=0.000), this indicates that there is a positive correlation between Surrogate Advertisements and Consumer Purchase Decision.

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Table 3 - Hypothesis Analysis

Variables	B	R^2	ΔR^2	Sig
Consumer Purchase Decision	0.187	0.042	0.022	0.000
Fictional Advertisements	0.198	0.166	0.189	0.000
Social Advertisements	0.362			0.000
Surrogate Advertisements	0.231			0.000

Hypothesis 1 - There is a significant relation between Fictional Advertisements & Consumer Purchase decisions. The regression coefficient results found that (β=0.198 & p<0.05), hypothesis is accepted.
Hypothesis 2 - There is a significant relation between Social Advertisements & Consumer Purchase decisions. The regression coefficient results found that (β=0.362 & p<0.05), hypothesis is accepted.
Hypothesis 3 - There is a significant relation between Surrogate Advertisements & Consumer Purchase decisions. The regression coefficient results found that (β=0.231 & p<0.05), hypothesis is accepted.

Key Findings

Overall men made up 56% of the responders, while women made up 44%. The Age of the people who took part in the study varied from 18 to 25 years old, with the largest proportion (38%) being between the ages of 22 and 25, and the next largest (26%) being between the ages of 18 and 21. Participants' educational backgrounds varied widely, with 29% holding a bachelor's degree, 46% a master's, 7% a doctorate, and 18% a professional degree. Consumer Purchase Decision (0.823), Fictional Advertisements (0.801), Social Advertisements (0.861), and Surrogate Advertisements (0.797) all have high reliabilities (>0.70). The mean and standard deviation for Social Advertisements 3.689789 and 0.936541; for Surrogate Advertisements 2.769291 and 0.989498; for Fictional Advertisements 2.143497 and 0.72769; for Consumer Purchase Decision 3.547522 and 0.830782; for Gender 1.413743 and 0.991167, for Age 2.467807 and 0.890757, and for Education 2.143497 and 0.991167. There is a positive relationship between Social Advertisements and Consumer Purchase Decision (r=0.228 & p=0.000), a positive relationship between Surrogate Advertisements and Consumer Purchase Decisions (r=0.076 & p=0.000), and a negative relationship between Fictional Advertisements and Consumer Purchase Decision (r =-0.081 & p=0.000). The initial hypothesis that Fictional Advertisements have a detrimental effect on Consumer Purchase Decision was supported by the regression coefficient value for such claims showing (r=0.198 & p=0.05). Furthermore, the data support the notion that Surrogate Advertisements positively influences Consumer Purchase Decision (r=0.231 & p=0.050). The third hypothesis, that there is a positive relationship between commercials for Social Advertisements and Consumer Purchase Decision, is supported by the value of the regression coefficient for such as (r=0.362 & p=0.05).

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DISCUSSION & CONCLUSION

The primary purpose of this study was to analyze the effects of internet advertising on the purchasing habits of Indian students. Primary data was gathered using a repurposed survey instrument from an earlier study. The facts and hypotheses were analyzed with the use of Pearson's correlation and regression analysis. Literature suggests that consumers are less likely to make a purchase if there are questionable claims made about it. Studies have shown that customers have a more favorable impression of businesses that use ethical business practices, and that negative information has a greater impact on consumers' opinions than good ones. Secondly, the existing body of research suggests that the positive correlation between surrogate advertising and consumer purchasing decisions is not a coincidence. Slogans in ads help attract our attention and might even prompt us to form new connections or reconsider our ideals. This research proves the importance of moral considerations while making a purchase. Ethics in marketing is an issue that resonates with consumers. Social interactions have a big effect on how much money people spend, and their friends often give them good advice about what to buy. Because of how they affect what people buy, the results show that businesses should encourage corporations to act in a moral way.

IMPLICATIONS

In order to win the confidence of customers, it will be reasonable to allocate resources to strengthen the security system. Customers want to feel confident in providing personal data and the data of their family members. Enhanced security systems and constant control over them will help avoid such incidents. The only people-centric approach able to generate real value for brands is through mobile. This is necessary to adjust their behavior strategy, find new ways to interact with customers, and deliver more relevant content. Brands should experience empathy, be responsible for their actions, and understand the human side of the issues.

LIMITATION & FUTURE SCOPE

When it comes to making purchases, Indian consumers were given the opportunity to weigh in on ethical problems that have not received much attention in the literature. Alternative variables may be tried on these dimensions. There is a potential independent variable of ad content and a potential dependent variable of customer purchase behavior.

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Ethical Leadership and Organizational Citizenship Behavior: The Mediating Role of Workplace Spirituality

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Introduction

Workplace spirituality and ethical leadership have recently gained immense importance in the current business scenario and government environment because it fosters a pleasant psychological environment for employees. The demographic transition in the workforce is reshaping the workplace and presenting difficulties for HR professionals in terms of hiring, developing, and managing employees. These problems have prompted the development of a suitable management technique called workplace spirituality, which aids in striking a balance between various facets of employees' life and the firm. The involvement of employees with more organizational goals is an important component of workplace spirituality (Mitroff & Denton, 1999). In such a situation, it is the responsibility of ethical leaders to ensure job satisfaction, fair treatment, justice and appropriate organizational behavior for their stakeholders in a regular manner that largely affects their overall motivation, satisfaction and commitment. Commonly, ethical leadership is a kind of leadership where leaders exhibit normatively appropriate behavior to influence their followers for the same accountable behavior (Brown et al., 2005), generally organizational citizenship behavior (Yang et al., 2016). They are the ones who guide the appropriate ethical and citizenship behavior to their subordinates by using role modeling and ethical standards. Recent studies have demonstrated a beneficial relationship between this leadership style and organizational citizenship behaviors (Wang & Sung, 2016; Yang et al., 2016). "organizational citizenship" coined by Organ (1988) explained several ideas, including cooperation and the difference between performance based on role and performance based on creative and spontaneous actions. Extensive literature review on ethical leadership has suggested that most of the researches are based on empirical studies using ELS scale developed by Brown et al., (2005), but the effect of ethical leadership on organizational citizenship behavior through workplace spirituality has not been discussed yet. So, the present study examines that ethical leadership can directly impact citizenship behavior or can be mediated by other factors, such as workplace spirituality. This study also provides fresh insight into the circumstances in which ethical leadership strengthens OCBs. This paper explores ethical leadership as the significant antecedent of workplace spirituality of employees working under IT industry. This paper also explores organizational citizenship behavior as the possible outcome of workplace spirituality. These terms have been discussed in the subsequent section. This paper is divided into three sections. The next section presents a detailed literature review, objectives of the study, conceptual framework. This is followed by research design, results and discussion. At the end implication, future research directions and conclusions are discussed.

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Review of Literature

Ethical Leadership

Studies on ethical leadership have emerged as an important topic in the literature of leadership and its related research since mid- 2000s. Literature has suggested two broad theories of ethical leadership and its effect on followers' behavior which are social learning theory (Bandura & McClelland, 1977) and social exchange theory (Blau, 1964; Homans, 1974).

Researchers of social learning theory have described that followers observe and emulate the behavior of their leaders (Bandura, 1986) because leaders act as their role models. Social exchange theory of ethical leadership has suggested that when ethical leaders show fairness and caring behavior towards their followers, they feel obliged and with this they try to work as per their leader's expectations (Brown & Treviño, 2006; Brown et al., 2005).

Ethical leadership has its root in justice, ethics, and honesty (Beauchamp & Bowie, 1988). They are also responsible for organizational behavior (Hemingway & Maclagan, 2004). Previous research has characterized ethical leadership into two different aspects. One is the moral person aspect of ethical leadership and another is the moral manager aspect of ethical leadership (Brown & Trevino, 2006). There are many leadership theories including transformational, spiritual and authentic leadership that have some common constructs with ethical leadership (Brown & Treviño, 2006). All these theories of leadership share some of the key similarities with ethical leadership for instance concern for others, integrity, role modeling and ethical decision making (Stouten et al., 2013; Kalshoven et al., 2013a; Kalshoven et al., 2013b; Wang & Sung, 2016). Despite having some common characteristics with other leadership theories, ethical leadership also shares some different constructs. In contrast to transformational leadership, which emphasizes vision, values, and intellectual stimulation, ethical leadership emphasizes more on the transactional component which includes the use of ethical standards, discipline and moral management for ethical misconduct (Brown & Trevino, 2006). Ethical leadership is also different from authentic leadership in terms of individual characteristics. Authentic leadership focuses mainly on self-awareness and authenticity whereas ethical leadership is more about ethical behavior, integrity, justice, and ethical decision-making (Walumbwa et al., 2008; Stouten et al., 2013). Studies have shown that when leaders maintain the organization's values and advance equality of treatment, good behaviors spread throughout employees, who become more motivated and engaged (Piccolo et al., 2010). Previous researches on ethical leadership have examined its relationship with employee commitment, employee job satisfaction, organizational citizenship behavior, perceived leader effectiveness, reduced deviant behavior, work engagement etc (Avey et al., 2011; Mayer et al., 2009; Neubert et al., 2009; Ponnu & Tennakoon, 2009; Walumbwa et al., 2011; Den et al., 2012).

Organizational Citizenship Behavior

Organizational citizenship behavior is defined as supplementary activity that goes above and beyond the requirements of the primary work and ultimately benefits the company (Bolino et al., 2002). Organ (1988) defined organizational citizenship behaviors as the common behaviors and activities that employees exhibit, including care, support, assistance, and assistance, which taken together support the efficient and effective operation of the organization but are often not listed in conventional job descriptions or conducted outside of formal obligations.

According to Robbins (2003), the OCB is a discretionary behavior that falls outside of an employee's formal job duties but nonetheless supports the organization's efficient operation. Employees' OCB is highlighted as proactive actions driven mostly by employees' willingness

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to volunteer for the organization (Lavelle, 2010). Furthermore, Organ and Ryan (1995) came to the conclusion that motives play a significant part in facilitating OCB since they influence people's thoughts and sentiments about a profession and an organization.

Researchers have defined OCBs as voluntary workplace behaviors that improve organizational effectiveness and such voluntary workplace behaviors are not explicitly specified by the organization, they go beyond the completion of a single task, and they are not associated with incentives (Ilies et al., 2009; Wang & Sung, 2016). They are actions that don't immediately assist in completing duties at work but instead help to sustain the organizational environment (Borman & Motowidlo, 1993; Organ, 1997). Researchers have also shown links between OCB and organizational commitment (Khaleh & Naji, 2016; Mehran, 2017), perceived organizational justice (Movassagh & Oreizi, 2014), and work engagement (Ahmad & Omar, 2014; Kolodinsky et al., 2008). Customer satisfaction, employee turnover, organizational performance and effectiveness, absenteeism, and withdrawal behavior are all organizational consequences of OCB (Podsakoff et al., 2000; Motowildo, 1993; Khalid & Ali, 2005).

Previous studies have also shown a good relationship between ethical leadership and desired employee behaviors like OCBs (Bedi et al., 2016; Sharif & Scandura, 2013).

Workplace Spirituality

Workplace spirituality involves an effort to discover one's life's ultimate purpose, to forge close relationships with coworkers and others connected to the workplace, and to have consistency (or alignment) between one's inner beliefs and the organization's value (Mitroff & Denton, 1999).

Pawar (2008) described and contrasted two methods for encouraging spirituality at work. The first method may be recognized as being organization-centric since it places a beginning point of focus on organizational procedures and spiritual principles to facilitate the transfer of these values. The other method (individual-centric strategy) is centered on a program for each employee's own spiritual growth. According to Marques (2005), workplace spirituality has several advantages for the business, such as improving interpersonal trust and fostering a more motivated workplace culture, all of which will ultimately improve performance. The culture of the workplace is dominated by workplace spirituality, which also improves peer knowledge and fosters interpersonal relationships (Giacalone & Jurkiewicz, 2003). Neck and Milliman (1994) noted that individuals nowadays are increasingly spiritually oriented both in their daily lives and at work. Maslow believes that self-actualization is connected to a sense of spirituality (Neck & Milliman, 1994). More chances for individual development are offered by organizations whose goals are founded on spiritual principles. Additionally, this feeling of expansion will serve to increase employees' excitement and desire (Neck & Milliman, 1994). According to Robbins and Judge (2008), spirituality at work refers to the understanding that those who have an inner life may grow and be nourished by meaningful work done in the context of a community. The majority of earlier research on workplace spirituality concentrated on the outcomes of workplace spirituality, such as organizational performance and job satisfaction (Belwalkar et al., 2018) and organizational citizenship behavior (Rego et al., 2010).

Objectives of the Study

The objectives of this study are to understand the effect of Ethical Leadership on Organizational Citizenship behavior of IT Managers. Present study is an attempt to explore the empirical link between ethical leadership and organizational citizenship behavior by examining the mediating role of workplace spirituality.

Conceptual Framework

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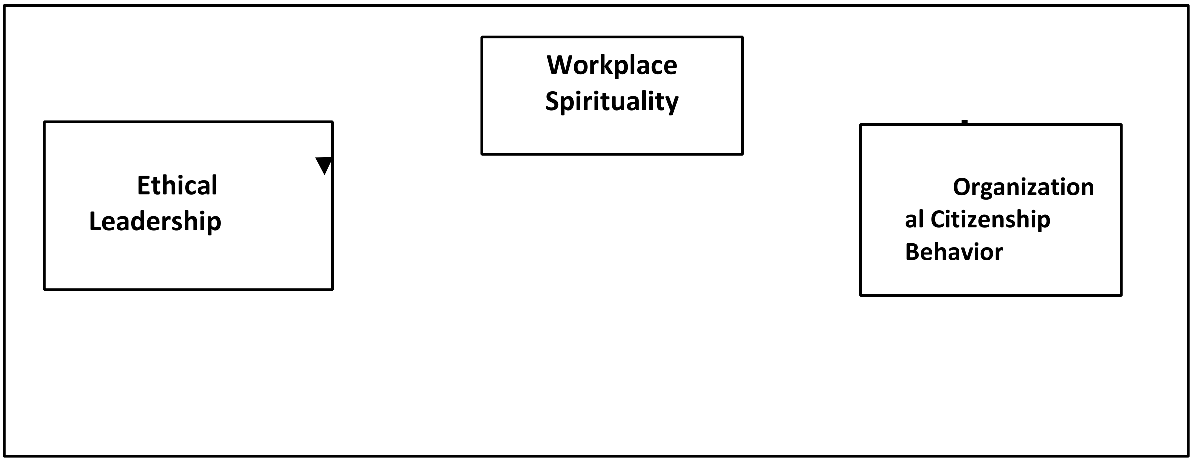
Based upon the literature, the conceptual framework of present study is indicating the relationship between ethical leadership and organizational citizenship behavior through the mediating effect of workplace spirituality. (Source: Constructed by the researcher).



Research Methodology
Hypothesis-
Following are the hypotheses based on the above framework
H1: Ethical leadership is positively related to organizational citizenship behavior.
H2: Ethical leadership is positively related to workplace spirituality.
H3: Workplace Spirituality is positively related to organizational citizenship behavior.
H4: Workplace spirituality mediates the relationship between ethical leadership and organizational citizenship behavior.

Research Methodology
Descriptive statistics and Purposive sampling technique is used in this study. The data collection method was quantitative for the purpose of this study. Sample size of current study is 272 IT managers from PAN India. The data collection method was quantitative for the purpose of this study. Both primary as well as secondary data is used in the present study. Primary data is collected from a structured questionnaire which consists of 40 items. Items for questionnaires are adopted from standard scales after reviewing the literature. Out of 272 respondents, 212 were male respondents (77.94%) and 60 were female respondents (22.06%).

Measurement Tools
These questionnaires were adopted from previous published research and were molded according to the need of present study. Five-point Likert scales from strongly disagree = 1 to strongly agree = five were used to measure items in the questionnaire. Ethical leadership, workplace spirituality and organizational citizenship behavior are used as independent, mediator and dependent variables respectively.
Workplace Spirituality
Researchers have used Ashmos and Duchon (2000) questionnaires to test workplace spirituality including items of inner life (7 items) and meaningful work (7 items). Sense of connectedness (4 items) is measured with three items from Kinjerski and Skrypnek (2006), and one item from Ashmos and Duchon (2000).
Organizational citizenship behavior
Researchers have used Podsakoff et al., (1990) scale to measure 12 items of organizational citizenship behavior.

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Ethical Leadership

Researchers have used Brown et al., 2005 scale to measure ten items of ethical leadership.

Data Analysis and results

The reliability and validity of the questionnaire were tested in order to evaluate its psychometric qualities. For the purpose of evaluating the validity of the study questionnaire, the opinions of academics and specialists in disciplines relating to this issue have been consulted. The internal consistency reliability is measured using Cronbach's alpha (Table 1) and it is higher than the necessary required threshold of 0.7 (Hair et al., 2010).

Table1. Reliability Statistics

Constructs	No of Items	Alpha (α)
Ethical Leadership	10	.940
Workplace Spirituality	14	.921
Organizational Citizenship Behavior	9	.806

Items indicating Cronbach's alpha less than 0.7 were removed from the study (INL2, INL3, INL4, INL5, OCB6, OCB, and OCB9). Averages and standard deviations of participants on ethical leadership, workplace spirituality and organizational citizenship behavior scales are given in Table 2.

Table2. Average, Standard Deviation of participants on ethical leadership, workplace spirituality and organizational citizenship behavior scales

Variables	Mean	Standard deviations
Ethical Leadership	3.880	1.005
Workplace Spirituality	4.001	0.975
Organizational citizenship behavior	3.862	1.078

Results

For the purpose of this study, regression and mediation analysis as the part of inferential statistics have been used to test the study hypotheses. The relationships between variables have been obtained by using SPSS 26 software.

H1: Ethical leadership is positively related to organizational citizenship behavior.

The hypothesis tests if ethical leadership carries a significant impact on organizational citizenship behavior. The dependent variable organizational citizenship behavior (OCB) was regressed on predicting variable ethical leadership (ELS) to test the hypothesis H1. Ethical leadership significantly predicted organizational citizenship behavior F= 90.879, p = 0.000, which indicates that ethical leadership can play a significant role in shaping organizational citizenship behavior (β=0.502, p=0.000). These results clearly direct the positive effect of ethical leadership on organizational citizenship behavior. Moreover, the R^2 = 0.252 depicts

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that the model explains 25.2 % of the variance in organizational citizenship behavior. Table 3 shows the summary of the results.

H2: Ethical leadership is positively related to workplace spirituality.

The hypothesis tests if ethical leadership carries a significant impact on workplace spirituality. The dependent variable workplace spirituality (WPS) was regressed on predicting variable ethical leadership (ELS) to test the hypothesis H2. Ethical leadership significantly predicted workplace spirituality F= 179.784, p = 0.000, which indicates that ethical leadership can play a significant role in shaping workplace spirituality (β=0.632, p=0.000). These results clearly direct the positive effect of ethical leadership on workplace spirituality. Moreover, the R^2 = 0.400 depicts that the model explains 40% of the variance in workplace spirituality. Table 3 shows the summary of the results.

H3: Workplace Spirituality is positively related to organizational citizenship behavior.

The hypothesis tests if workplace spirituality carries a significant impact on organizational citizenship behavior. The dependent variable organizational citizenship behavior (OCB) was regressed on predicting variable workplace spirituality (WPS) to test the hypothesis H3. Workplace spirituality significantly predicted organizational citizenship behavior (F= 70.938, p = 0.000), which indicates that the workplace spirituality can play a significant role in shaping organizational citizenship behavior (β=0.456, p=0.000). These results clearly direct the positive effect of workplace spirituality on organizational citizenship behavior. Moreover, the R^2 = 0.208 depicts that the model explains 20.8% of the variance in organizational citizenship behavior. Table 3 shows the summary of the results.

Table3. Regression analysis results

Hypothesis	Regression Weights	Beta Coefficient	R^2	F	p-value	Hypotheses Supported
H1	ELS□OCB	0.502	0.252	90.879	0.000	Yes
H2	ELS□WPS	0.632	0.400	179.784	0.000	Yes
H3	WPS□OCB	0.456	0.208	70.938	0.000	Yes

Ethical leadership (ELS), Workplace Spirituality (WPS), Organizational Citizenship behavior (OCB)

H4: Workplace spirituality mediates the relationship between ethical leadership and organizational citizenship behavior.

The study assessed the mediating role of workplace spirituality on the relation between ethical leadership and organizational citizenship behavior. The result revealed a significant direct effect of ethical leadership on organizational citizenship behavior was positive and significant (β=0.2825, t=5.3394, p=.0000) supporting H1. Furthermore, the indirect effect of ethical leadership on organizational citizenship behavior in presence of the mediator was also found significant (b= 0.1162, p=.0000), supporting H4. Hence, workplace spirituality partially mediated the relationship between ethical leadership and organizational citizenship behavior. Mediation analysis summary is presented in table 4.

Table4.Mediation analysis results

Relationship	Direct Effect	Indirect Effect	Confidence Interval		P-value	Conclusion
			Lower Limit	Upper Limit		
ELS□WPS□	0.2825	0.1162	0.0419	0.1958	0.0000	Partial

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OCB	Mediation

Predictor- Ethical leadership (ELS), Mediator- Workplace Spirituality (WPS)
Dependent- Organizational Citizenship behavior (OCB)

Discussion

The results confirmed that ethical leadership was a significant predictor for organizational citizenship behavior (Mo & Shi, 2017) and workplace spirituality (Johnson, 2009). The relationship between ethical leadership, organizational citizenship behavior and the mediator workplace spirituality was significant and positive. Hence, concluded that workplace spirituality partially mediated the relationship between ethical leadership and organizational citizenship behavior.

Implications

The study has important practical implications. The speed of change in overall growth will be determined by how well we nurture an ethical leader. Ethical leadership will drive sustainable development, particularly in emerging nations. In order to experience sustainable development, the role of ethical leadership is to influence good environmental and social change via thoughtful actions and behaviors that embrace a global viewpoint. This means that great OCB practices should enable organizational leaders to motivate their workforce. The firm will undoubtedly be able to attain excellent quality and productivity at a lower cost thanks to this, and our nation's economy will also benefit. Ethical leadership behaviors are crucial for improving workers' civic engagement and organizational citizenship behavior. Therefore, businesses may spend more money choosing their leaders and educating them on how to conduct themselves ethically. Instead of asking candidates about ethics and ethical challenges during the interview process, firms may, for instance, employ integrity and work ethics assessments when selecting leaders. It is crucial for leaders to exhibit the proper set of work behaviors that go above and beyond the requirements of their positions while also making a significant contribution to the efficiency of the organization.

Future directions

The current study concentrated on the information technology (IT) industry. Future studies can look into the influence of ethical leadership on workplace spirituality and organizational citizenship behavior on many other industries, such as educational, non-profit organizations, banking and insurance enterprises, as these industries are most significant and people-oriented. Here, workplace spirituality has been used as the mediator but other mediators such job satisfaction and employee engagement can also be taken into consideration. Upcoming research may also incorporate some moderators like age, gender, and experience. To strengthen and support the findings of quantitative research, qualitative research can also be done in future studies as the survey method has some limitations.

Conclusion

By acting morally, ethical leaders uphold the dignity of their team members, subordinates, and other relationships both inside and beyond the organization. In both a personal and professional setting, ethical leaders have a significant impact on their followers' ethical behavior. Leaders' decision-making is influenced by their ethics, beliefs, and ideals. Furthermore, businesses that want to be really ethical must foster workplace spirituality because when workplaces ignore it, ethics becomes disoriented. The study led to the conclusion that ethical leadership is crucial to the long-term sustainability of a society.

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Keywords: Workplace Spirituality, Ethical leadership, Organizational Citizenship behavior

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The Mediating Role of Empathy and Resilience in the Mechanism of Influence of Emotional Intelligence on Ethical Decision-Making Process

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Abstract

Emotions are emerging to be recognized as playing a more and more prominent role in the ethical decision-making process in recent years. Therefore, the skill of assessing, managing, and employing emotions, commonly known as emotional intelligence, should naturally be an effective facilitator of the ethical decision-making process. Emotional intelligence involves the possession of two types of awareness and management capabilities- one in the social realm and the other in the self-domain. Emotional intelligence enhances various competencies, of which, we choose two fundamental competencies, one each from the social and self domain, namely empathy and resilience, that we propose to be playing a substantial foundational role in enriching the ethical decision-making capabilities. Empathy and Resilience collectively together ensure that each of the four stages of Rest's ethical decision-making process namely sensitivity, judgment, motivation, and behavior are enhanced by either or both of the competencies. We propose a model and contribute supporting rationalization and arguments to it where emotional intelligence influences the ethical decision-making process by empathy and resilience playing a mediating role. The contribution of such models can help in making the theoretical relationship between the fields of emotional intelligence, ethics, empathy, and resilience more explicit. Moreover, individuals, organizations, or society can make a more systematic and concentrated effort to enhance emotional intelligence and ethical decision-making capabilities by developing various transformation methods and practices with such models as the foundation.

Keywords: Emotions, Emotional Intelligence, Ethical Decision Making, Empathy, Resilience

Introduction

Although there is an emerging consensus on the existence of the role of emotion in ethical decision-making and the decision-making process in general (McManus, 2021; Kligyte et al., 2013), there is still a debate regarding the mechanism of its contribution (McManus, 2021). Emotions and cognition interact in different forms, such as reinforcing, contributing to, and overriding each other (Liu et al., 2009; Gray, 2020). In terms of transience, emotions can be experienced to take more time to transform as compared to thoughts. When emotions are so deep-rooted, and when they indirectly and directly influence the decision-making process, it becomes important to study the nature of emotions and the art of regulating them for individual and societal benefit. Proficiency in the art of efficiently assessing, managing, and employing emotions, also known as emotional intelligence, undoubtedly impacts ethical decision-making positively. Emotional intelligence is known to develop some other

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capability that bestows an indirect mechanism for emotional intelligence to impact ethical decision-making processes positively. These mechanisms through which emotional intelligence positively influences ethical decision-making processes are critical to be studied. For example, emotional intelligence can be reasoned to be enhancing competencies such as adaptability (Coetzee & Harry, 2014), creativity (Parke et al., 2015), self-efficacy (Gharetepeh et al., 2015), empathy (Fitness & Curtis, 2005; Schutte et al., 2001), etc. of an individual. The enhancement of such competencies can also be rationalized to influence the ethical decision-making process positively. Only by understanding such mechanisms of influence in more depth can we consciously design processes to individually and collectively evolve towards higher emotional and ethical decision-making competencies and capabilities. We, in the paper, in order to fill the gap and further marry the fields of emotional intelligence and ethical decision-making process, have picked two such competencies, namely empathy and resilience, that we propose to be the most fundamental constructs of the social and self dimensions of emotional intelligence respectively, mediating the influence of emotional intelligence on ethical decision making. We present the theoretical model for the same and present our arguments supporting our model.

Literature Review on the Role of Emotions and Emotional Intelligence in Ethical Decision-Making

Conventionally, ethical decision-making was assumed to be a purely cognitive process (Kohlberg, 1969; Trevino, 1986; Rest, 1994). Rest (1994) imparted a model that deconstructed the ethical decision-making process as a 4 step mechanism. The first step- of ethical sensitivity involves being receptive to the inputs from the environment and noticing the ethical demands of the situation. The second step of ethical judgment involves an analysis of the ideal ethical response to the situation. Ethical motivation, the third step, entails garnering the inspiration to act in accordance with ethical judgment. Gathering courage, perseverance, and confidence to translate the intention into actualization corresponds to ethical behavior, the fourth and last step of the ethical decision-making process.

Lately, the dual processing (McManus, 2021; Evans & Stanovich, 2013; Kahneman, 2011; Greene et al., 2001) modeling of decision-making has become widely accepted. System 1 corresponds to the instantaneous, reflexive, fast, instinctive, and intuitive response (Evans, 2011). These processes are often driven without conscious awareness (Thompson, 2009; Haidt, 2001). Simultaneously, engaging system 2 involves greater use of cognitive power and time (Mauss et al. 2007b) in undertaking a focussed deliberate evaluation (Evans, 2011; Kahneman, 2011). The existence of system 1 is evolution's way of saving limited cognitive resources to make nearly efficient responses based on shortcuts and heuristics. According to Epstein (2010), neither of the two systems is better than the other as each is superior and inferior to the other in its own important and unique way. Tversky and Kahneman (1974) described how the shortcuts and heuristics which are most often helpful are also the sources of deviation from rationality.

Horberg et al. (2011) show that upon instigating distinct emotions based on one's personal approach to external circumstances, judgments about right and wrong differ by imparting different priorities to sociomoral concerns. For example, since fear is related to a feeling of uncertainty and lack of control over external situations when one is fearful, subsequent moral judgments reflect increased concerns about uncertainty and reduced control even when the object of judgment (e.g., ethical dilemma) is different from the source of fear (e.g., horror film). Horberg et al. (2011) rendered a list of emotions and corresponding sociomoral concerns associated with the emotion. The instigation of these emotions will heighten the salience of the associated sociomoral concerns, and the person feeling the emotions will be making ethical decisions from those frames of reference.

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Table 1. Summary of Emotion and Associated Sociomoral Concern

Emotion	Sociomoral Concern
Disgust	Purity of mind and body
Anger	Independence, Rights, Justice, Fairness
Contempt	Community Role, Duty
Compassion	Harm, Care, Weakness, Need
Pride	Hierarchy, Status, Merit
Guilt	Own Transgression
Shame	Own Characterological Flaw
Gratitude	Reciprocity
Awe, Elevation	Other’s Virtue

Source: Adapted from Horberg et al. (2011).

Emotions can be simply classified into a 2x2 matrix. One dimension of emotionality is arousal, and the second is feeling (Gaudine & Thorne, 2001). Arousal measures the intensity of the emotion, whereas feeling measures the valence of emotion. Gaudine and Thorne (2001) present how these emotions classified into this 2x2 matrix affect the 4-stage ethical decision-making mechanism rendered by Rest (1994). They propose that positively valent emotions positively influence ethical sensitivity, ethical judgment, and ethical motivation. Also, higher alert and arousal states were proposed to be positively influencing ethical sensitivity, ethical judgment, and ethical behavior. Therefore, positively valent aroused states of emotions collectively facilitate the ethical decision-making process.

Although emotions such as anger could be elicited in response to the observation of violation of moral norms, such states of mind and decisions taken from such a state of mind might not prove to be beneficial for the individual experiencing the emotions and society where consequences of decisions will be actualized. Therefore, not elicitation of all emotions elicited by the observation of violation of moral norms might result in productive outputs. Emotional intelligence, which includes not just the awareness of the present moment but emotional regulation and effective employment of emotions, was found to positively influence the ethical decision-making capabilities of hospital employees (Deshpande, 2009). Mesmer-Magnus et al. (2008) found emotional intelligence was significantly correlated to the ethical behavior of self and peers in undergraduate students at a university. Emotional intelligence was found to be having the potential to be used as an impetus to encourage ethical policing in Nigeria and stop corruption by transforming attitudes among police officers by Aremu et al. (2011). Fu (2014) found that emotional intelligence significantly positively impacted ethical behavior among Chinese employees. Krishnakumar and Rymph (2012) found that individuals who were relatively Emotionally Intelligent were better able to manage emotions of sadness and anger so as to make better ethical choices. Therefore, recently, there have been multiple studies that examine the effect of emotional intelligence on ethical decision-making capabilities.

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Emotional intelligence is explained to be "the set of abilities that enable a person to generate, recognize, express, understand, and evaluate their own, and others, emotions in order to guide thinking and action that successfully cope with emotional demands and pressures" (Van Rooy & Viswesvaran, 2004, p. 72). Mayer and Salovey (1997) proposed a four-dimension model of emotional intelligence that comprises the ability to: 1) perceive, appraise and express emotion, 2) assist thinking using emotional information, 3) comprehend and scrutinize emotion, and 4) reflectively regulate and manage emotions. Goleman (1998) recognized four components of emotional intelligence, namely 1) self-awareness, 2) self-management, 3) social awareness, and 4) relationship management. Self-awareness includes aspects such as self-confidence, and self-regulation consists of skills such as self-control and adaptability. Social awareness includes inculcating competencies such as empathy and service orientation, and relationship management involves features such as influence, communication, and collaboration (Serrat, 2017).

Although it has already been empirically shown, and more and more studies are further proving the positive role of emotional intelligence in facilitating ethical decision-making capabilities amongst individuals, there is a need to deepen our understanding of the mechanism through which emotional intelligence is supposed to be influencing the ethical decision-making process. Emotional intelligence might influence the ethical decision-making process through many direct and indirect routes. Emotional intelligence is accompanied by various competencies that assist in properly assessing, acknowledging, regulating, and employing emotions to constructive uses. Connecting the theories of the fields of emotional intelligence and correspondingly enhanced competencies and ethical decision-making process is an important gap that needs to be filled currently since the scope of emotional intelligence and ethical decision-making is highly overlapping. The next section will attempt to provide one of the foundational works of this critical work of developing a more thorough understanding of the mechanism of interaction between emotional intelligence and the ethical decision-making process.

Theoretical Model

Emotional intelligence, as classified by Goleman, has four components. These components could simply be understood as having two dimensions. The first dimension is self and the second dimension is social. The self dimension includes the components of self-awareness and self-management. The social dimension consists of components such as social awareness and relationship management/ social management. Therefore, to build up a theoretical framework of the mechanism of influence of emotional intelligence on ethical decision-making, we will take two constructs, one each from the two dimensions of self and social mentioned, and propose how these constructs could impact the ethical decision-making process. We have already seen that emotional intelligence, which is known to be enhancing positive emotions (Szczygieł & Mikolajczak, 2017; Nelis et al., 2011) and alert states of mind due to mindfulness, can directly positively influence the ethical decision-making process (Gaudine & Thorne, 2001). However, there are some other mechanisms through which emotional intelligence, by enhancing some other constructs, can augment the ethical decision-making capabilities of an individual. The constructs such as adaptability, creativity, confidence, inclusivity, etc., each can positively influence the ethical decision-making capabilities of an individual. However, all these constructs, which are too complex in themselves, are also too overlapping with each other. Therefore, we select two fundamental constructs- resilience and empathy as the self-dimension and social dimension representative to evaluate the effect of its enhancement on ethical decision-making capabilities. Resilience and empathy are two important competencies developed through emotional intelligence. Harvard Business Review, in their published series on emotional intelligence, identified

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empathy and resilience to be one of the few important dimensions of emotional intelligence to be represented and dedicated a complete individual book for them. Merriam-Webster defines empathy as "an act of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experiences of another in either the past or present without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner." The American Psychological Association defined resilience as "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands."

Numerous researchers have found that individuals with higher emotional intelligence are also more empathetic toward other people (Fitness & Curtis, 2005; Schutte et al., 2001). Emotional intelligence helps one to be in touch with one's own emotional state. This awareness about one's own emotional states assists one in understanding the source of their emotions, their interaction with other internal aspects such as cognition, the exhibition of these emotions in behavior such as in body language, etc. This understanding of the mechanism of elicitation, development, interaction, and aftermath of the emotions also helps one to connect with others' emotional states since these underlying processes are fundamentally universally common to all human beings, thus generating empathy. As mentioned by Elliott et al. (2011), there has been an emerging consensus about the three different constituents of empathy. The first one is emotional empathy, which consists of being able to feel what others would have been feeling (Elliott et al., 2011; Decety & Lamm, 2009). The second subprocess of empathy is cognitive empathy, wherein one is able to adopt the perspective of what others might have been going through or what others might be thinking (Elliott et al., 2011; Shamay-Tsoory, 2009). The third constituent of empathy is the emotional regulation process that facilitates soothing the distress an individual might go through upon observing another's suffering, further enabling and synthesizing the compassion required to help the other (Elliott et al., 2011; Decety & Lamm, 2009).

The other construct that we propose that is enhanced by emotional intelligence and can potentially be an enhancing factor for ethical decision-making is resilience. With better awareness of one's own emotional patterns of behavior, one becomes better at understanding the source of such emotional patterns. Being aware of the emotional patterns and their source helps in the non-judgmental acceptance of the emotions. If those emotions are not beneficial for one's well-being and societal welfare, knowing the source can help in bringing about meaningful transformation to one's perception and approach to the situations. Such relentless practice of non-judgmental acceptance and the effort of transforming emotional patterns through positive sensemaking helps in becoming equanimous even in times of crisis. Coutu (2002) mentions that there are three main characteristics of resilience. Resilient people face reality or, in other words, have acceptance of reality. Moreover, they also engage in the search for meaning or, in other words, try to adopt a positive sensemaking approach to the situation. Lastly, they are good at continually improvising, or in other words, they constantly aspire to make the best of what they have got. Numerous studies have proven a positive correlation between emotional intelligence and resilience (Droppert et al., 2019; Fabio & Saklofske, 2018; Schneider et al., 2013), as reviewed by Zheng (2021). Therefore, emotional intelligence can be associated with enhancing resilience.

To understand the influence of emotional intelligence on the ethical decision-making process, we will adopt the ethical decision-making model proposed by Rest and understand how emotional intelligence impacts each of the steps of the model. The first step of Rest's model of ethical decision-making is sensitivity to the existence of ethical facets in the situation. Sometimes, the natural inclination in a situation is to assess the situation from just one's own perspective. The capability to be receptive to the viewpoint of other stakeholders and the

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welfare of society, in general, ignites ethical sensitivity in a particular situation. This ability to be able to put oneself in others' shoes and dissolve one's own biases corresponds to being ethically sensitive. The complex task of walking in others' shoes requires one to disengage one's own judgments and be able to adopt other stakeholders' outlooks to imagine the effect of the situation on them. It is not just enough to imagine the situation from the vantage point of all stakeholders, but along with imagination, one should also be capable of feeling their fears and desires to be able to be sensitive to the ethical dimension of the situation. Therefore, both emotional empathy along with cognitive empathy facilitates ethical sensitivity. Imagining the perspectives and feelings of different stakeholders can make one receptive to the conflicts in the interests existing in the situation, thus making one ethically sensitive. As stated by Rezapour-Mirsaleh et al. (2022), empathy was found to be one of the most vital elements for the identification of moral affairs and can boost morale sensitivity (Yuguero et al., 2019; Kim et al., 2022). Therefore, qualities like empathy are a must to be able to be sensitive to the ethical facets of the situation in order to make an ethical decision. Therefore, we propose that:

P1: Empathy will mediate the relationship between emotional intelligence and ethical sensitivity.

The second step of Rest's ethical decision-making is an ethical judgment. Having understood how the presented situation elicits various fears and desires amongst stakeholders and being sensitive to them, it becomes important to be further concerned about the stakeholders' future experiences that have the power to be influenced by our decisions. Being able to understand others' outlooks and being able to empathize with them helps one in generating different prospective actions that might be beneficial to the different sets of stakeholders. Moreover, what each of the stakeholders wants might not be without conflicts in an ethical dilemma-type situation. Therefore, in order to refine the set of prospective actions, being able to empathize with others helps in deciding which of the demands should be fulfilled and which of them can be compromised for the overall welfare. Therefore, cognitive sensitivity, which assists in imagining and accessing the prospective future mental states of the agent or those going to be affected by the decision, can improve ethical judgment, as mentioned by Kauppinen (2017) too. However, with emotional empathy, there could be a tendency to relate to the future experiences of the stakeholders closer to oneself more than the others, therefore inducing biases in one's judgment capacities (Kauppinen, 2017). However, Kauppinen (2017) further states that an analysis by Hume, which digs further deep, reveals that values such as justice, which are universal and thus bias-free, are only sprung because of enlightened self-interest existing in humans. Therefore, even having unbiased emotional empathy helps in generating possible ethical responses and prioritizing needs according to what the best for society is rather than just being biasedly considerate about personal or some exclusive set of stakeholders' welfare. Therefore, we propose that:

P2: Empathy will mediate the relationship between emotional intelligence and ethical judgment.

As mentioned by Denham (2017), there are two forces that may counter the third step of Rest's ethical decision-making process, ethical motivation- indifference and self-interest. Denham further mentions that empathy generates altruism that counteracts these forces and provides enough impetus to behave ethically or pro-socially. There is good enough reason to believe that being moved by moral norms such as kindness, justice, loyalty, etc., has roots in being able to be moved by the interests of other people or a larger collective entity. This tendency of being able to be altruistic toward others further has roots in being able to empathize with them. Batson (2011) finds that individuals who are primed to be empathetic to the victims are more strongly intrinsically motivated to help them. He finds that altruism

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induced due to empathy priming facilitates ethical or prosocial behavior even when reward incentives were absent, there were no guilt incentives, there was no means of getting praised or receiving gratitude, or when refusing to help pledged a pleasurable experience similar to that of helping. The reason for empathy being able to elicit altruistic motives could be due to the enhancement of salience of one's more inclusive expansive identities, such as being a life or being a part of nature by being able to feel and connect with others' experiential states. This connection with the larger, more expansive identities helps in wanting to promote the collective interests rather than being indifferent to them or just desiring to further ego-centric interests. This essentially translates into the enhancement of ethical motivation by intensifying empathy. Therefore, we propose that:
P3: Empathy will mediate the relationship between emotional intelligence and ethical motivation.

Resilience can be proposed to enhance ethical judgment. Better ethical judgment requires one to be able to evaluate the situation without being biased by one's individualistic egoistical desires, which are in contradiction with the betterment of society. These individualistic desires are rooted in either some form of fear or attachment. Either one would want to get something important to them, or one would not want to lose something important to them. Therefore, the role of resilience in such a situation is to regulate such fears and attachments so that one is in an equanimous state to make unbiased, ethical decisions. Equanimity, as a result of such resilience from one's individualistic compulsions, also helps in enhancing creativity. Researchers have found resilience to be playing a role in fostering creativity (Kim, 2015; Fernandez-Martinez et al., 2017). In complex ethical situations, one may need this creativity to envision the different possibilities of approaches that may endorse different ethical values, such as justice, compassion, truth, or any combination of them. Since it might not be possible to satisfy each stakeholder's necessities, creativity may also help in thinking of a variety of out-of-box approaches that may identify and resolve the most crucial ethical requirements of the situation while hurting the least possible stakeholders, which is a manifestation of divergent creative thinking process as stated by Cropley (2006). Creativity may further also come in handy in remembering beneficial past experiences and consolidating memory and information into forming a useful approach to the situation demanding ethical consideration, which is a manifestation of the convergent creative thinking process (Cropley, 2006). In support of this argument, Darvishzadeh & Bozorgi (2016) show that resilience enhances ethical judgment. Therefore, we propose that:
P4: Resilience will mediate the relationship between emotional intelligence and ethical judgment.

Moreover, resilience also can be proposed to be enhancing ethical motivation. Emotionally intelligent people who are resilient have a strong sense of self-regulation. As Artuch-Garde et al. (2017) mention, numerous researchers have found a relationship between self-regulation and resilience (Tugade & Fredrickson, 2004; Lerner et al., 2013). They further found that self-regulation acts as a predictive factor for resilience (Eisenberg & Spinrad, 2004). A resilient person knows the downsides of furthering the ego-centric motivations of eventually having to face uncomfortable emotions as a consequence. Therefore, resilience can be understood to be associated with the ability to develop self-regulation of one's selfish desires and the ability to align one's interest with the betterment of the collective whole, which is necessary for behaving ethically or pro-socially. Self-regulation is needed to resist yielding to egotistical desires, which often seem beneficial to oneself but are unethical and harmful for the larger scheme of things in the long run. Usually, when one is conscious about the nature

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of the more self-absorbed desires in oneself and can differentiate those desires from the inclusive aspirations, the ability to self-regulate oneself helps in subsiding the selfish desires and activating the embracing beneficial ones like that of being ethical. Therefore, we propose that:
P5: Resilience will mediate the relationship between emotional intelligence and ethical motivation.

Resilience can also be proposed to be enriching ethical behavior. As mentioned by Rushton (2016a; 2017), sometimes, while facing a situation demanding ethical considerations, a person can feel moral distress wherein they can recognize their ethical responsibility can execute the proper ethical evaluation of the situation but can be prevented from following through. In such situations, as mentioned by Rushton (2017), cultivating resilience may help in developing the individual's capacity to support, reinstate, or intensify one's "integrity in response to moral complexity, confusion, distress or setbacks" (Rushton, 2016b). Resilience, in such situations, helps one in reframing the situation into a challenge wherein the person could feel a sense of control (Young & Rushton, 2017; Monteverde, 2014a; Monteverde, 2014b). Resilience also generates mental stamina of being able to overcome the failures of not acting according to one's ethical predilection and helps one remain stuck to their principles (Young & Rushton, 2017; Lützén & Ewalds-Kvist, 2013). The reason for all these research findings could be multiple. Resilience could enhance the sense of control over internal and external situations, thus furthering the confidence to effectuate positive changes around oneself wherever necessary. Even in the face of adversity, one remains confident and convicted about the rightness of their examined approach. In cases where an individual has to adopt an action that hurts their personal interests but furthers collective interests, resilience gives the courage to face whatever situation may emerge in their share in the future. Thus, resilience could be proposed to be enhancing ethical behavior. Therefore, we propose that:
P6: Resilience will mediate the relationship between emotional intelligence and ethical behavior.

Along with these relations, we also propose that empathy and resilience also share a positive relationship with each other. We propose that empathy would help in building resilience. There are multiple possible reasons for proposing this. First, a person who is empathetic is more socially intelligent. With social intelligence, they usually have healthy and deep relationships with others. These strong relationships with others help them in becoming secure of themselves, having high self-esteem, and feeling supported by others in times of distress. Moreover, empathy also helps in building an other-centered approach. This other-centered approach helps in preventing one from getting overwhelmed by personal challenges by diluting the significance being given to them. Thus, empathy helps in putting personal challenges in proper perspective by shifting the focus to viewing things from the perspective of the larger scheme of things, thus building resilience. Further, empathy helps in connecting with the joys of others and generates an appreciation for the wonders of the natural world. Thus, empathy helps in imbibing and reflecting the joys of others and the magical mysteries of the universe. Due to all these reasons, it is reasonable to propose that empathy enhances resilience. Therefore, we propose that:
P7: Empathy will be positively associated with resilience.

The other way around can also be proposed to be true. Resilience can be imagined to be positively associated with empathy. Firstly, resilience is only possible when one understands the dynamics of the internal operating mechanisms. Without understanding the different patterns of mind that lead to the arousal of different emotions and cognition, one cannot

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accept them or regulate them. These patterns of mind, in their most fundamental essence, are similar in all human beings. Therefore, a resilient person who knows how to consciously regulate and fabricate different internal states of being also can understand what others might be going through. Further, resilience helps in not getting overwhelmed and completely occupied by one's own challenges and frees up mental bandwidth to be receptive to the needs of others, thus further enhancing empathy. Moreover, a resilient person understands that not caring for others and being self-centered is a reason for the elicitation of numerous unpleasant emotions. Therefore, a resilient person knows the importance of possessing an inclusive approach to situations in order to fabricate a pleasant internal atmosphere even in the midst of external hurdles. Empathizing with others is an important component of developing an inclusive approach to the situation since it is then only that one understands what is beneficial for the collective whole. Therefore, due to all these reasons, it is sensible to assume that resilience can enhance empathy in an individual. Therefore, to conclude, we further propose that:
P8: Resilience will be positively associated with empathy.

Based on the relations we have discussed in the paper, we propose the following model of interaction of emotional intelligence and ethical decision-making through empathy and resilience playing a mediating role.

Figure 1. Model of Mechanism of Influence of Emotional Intelligence on Ethical Decision-Making Process with Empathy and Resilience playing a Mediating Role

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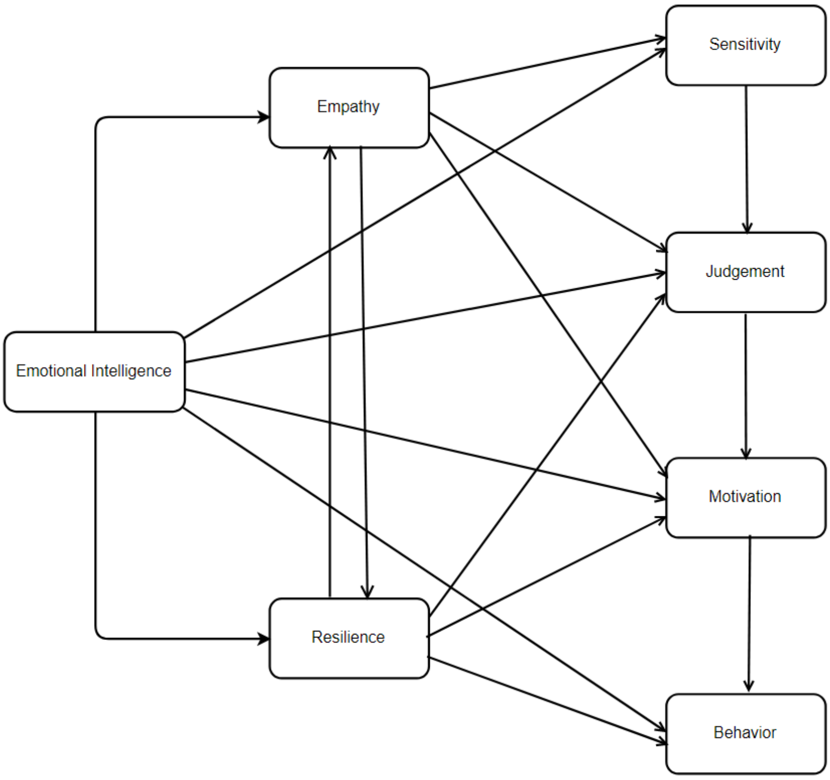

Discussion and Future Work

The contribution of such a theoretical model can serve as an impetus to carry out more empirical studies on these topics. The establishment of such a theoretical model can be of great aid for application in the real world. The first and foremost application of such models could be to enhance one's individual emotional intelligence and ethical decision-making capabilities. This theoretical model helps the readers in building a mental model of how the concepts of emotional intelligence, empathy, resilience, and ethical decision-making are related. So, whenever an individual who has adopted such a mental model faces a situation, they will be better aware of the internal responses different situations generate in them along the direction of these different constructs. Even while responding to the situation demanding ethical reaction, one may be able to regulate and enhance one's ethical decision-making capabilities by integrating such mental models and thus simply just getting aware of one's existing empathetic and resilience states at the moment. The mental model can also help in evaluating one's past actions along the criteria of these created constructs and learning from them.

Furthermore, establishing such a mechanism of influence of emotional intelligence on ethical decision-making processes helps in building a collective culture of ethics in a team or an organization. Knowing that the existence of the influence of empathy and resilience on ethical decision-making processes can help in better articulating the demanded values and code of ethics of the organization. It also assists in recruiting employees more compatible with the organizational culture since the refined understanding of the ethical decision-making process will help in better measuring the ethical orientation of the employee by including the evaluation of a measure of empathy and resilience. The knowledge of such a mechanism of influence can also be integrated into the training modules of the organizations. Empathy training and resilience training is a more tangible programs to implement in addition to something like ethical training, which is more abstract and contextual in nature. Therefore, enhancing empathy and resilience in an organization can be a more rigorous means to strengthen the ethical culture of the organization.

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Emotional intelligence can enhance a lot of different competencies other than the two mentioned in the paper. It is further important to recognize those proficiencies and their mediating and moderating roles so as to understand the mechanism of influence of emotional intelligence on ethical decision-making better. Therefore, one prominent future work to advance this field would be to develop more detailed frameworks on these topics that include several other competencies that are enhanced due to emotional intelligence. Further empirical experiments should be conducted to validate such theoretical models. Among many such other constructs, one important characteristic is that of devotion. It has been accepted experientially by a lot of people that devotion can enhance ethical decision-making skills, but this phenomenon still lacks academic attention. There is a dire need to pay academic interest to the trait of devotion and find links between emotional intelligence, the practice of devotion, and the facilitation of ethical or prosocial actions.

Conclusion

Emotional Intelligence and Ethics is a crucial subject matter for the progress of society. Only an emotionally intelligent and ethical society lives in harmony. To achieve such synergy amongst the citizens, it is necessary for the academic community to provide theoretical and empirical support to the dynamics and mechanics of the interaction of emotional intelligence and ethical decision-making process. The research at the intersection of emotional intelligence and ethical-decision making has a huge necessity and potential to grow. Knowing how to employ various faculties, especially emotion, is important to raise awareness of society and make people ethical. Emotion should not be considered a hindrance but a necessary accessory for ethical decision-making. It is our responsibility to find out and make available the science of properly recruiting emotions to assist the ethical decision-making process for establishing harmony in society.

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Moral Drain of High Intellectuals: An Ethical Issue for Exploration

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Abstract

Purpose: The research aims to explore and discuss further about deficiency of morality consciousness among the academicians and high-level talents in the universities in the world.
Design/methodology/approach: This is a discussion paper, which reviews, summarizes, debates, discusses and concludes about the issue of moral deficiency among the academicians and high-level talents in the universities in the world.
Discussions: New problems of moral deficiency of high intellectuals and high-level talents require for extensive attention and rectification in the education industry and universities in the world.
Research Implications: The research aims to provide further insight the moral deficiency of high intellectuals and high-level talents and to raise awareness about this ethical issue.
Practical Implications: The research proposes on how to prevent the moral deficiency of high intellectuals and high-level talents and methods to strengthen the moral construction of high intellectuals and high-level talents to rectify the ethical issue discussed.
Originality: The discussion paper is an original work which has not been published.

Keywords: Ethical issue, moral drain, morality, business ethics, ethical misconduct

1.0 Introduction

What is morality? Why is morality easy to lose?
Morality is a kind of social agreement, which has universality, periodicity and limitation (Flores & James, 2013). Morality is recognized by most groups in the society. This moral agreement exists to safeguard the interests of many people. It stabilizes the interests obtained through standardized moral methods, and becomes a rule or a culture and behavior. It enables people to form basic and invisible acquiescence and recognition through the influence of time, education, politics, religion, folk customs, living habits and cultural communication. It is a kind of respect and awe for the changes of the laws of nature and the universe. Early human beings worshipped the nature of heaven and earth and gradually formed a relative law. For example, changes in spring, summer, autumn and winter, water, fire, earth, gold, wood, thunder, electricity, wind, etc. These are people's worship and awe of the laws of the natural universe, thus producing the behavior of obeying the laws of nature. That is, the embryonic form of moral norms. With the continuous progress of society and the continuous development of science and technology, human civilization is also progressing, and moral requirements are becoming more and more standard. Morality is a way of evaluating good and evil, which mainly depends on social public opinion, traditional customs and internal beliefs to play a role in the code of conduct and sum up, and is an inevitable product of the development of human society to a certain stage (Emmerich, 2016). Therefore, morality is the

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ultimate answer for people to live in harmony with nature in the process of survival. It not only reflects nature, but also gives consideration to the natural attribute, social attribute and the return of human nature in morality. So, simply put, morality is the norm. It comes from the organic law of natural law, which is stricter and more accurate than the law.

So why is morality easy to lose? Essentially, it is the excessive pursuit of self-interests - morality is actually a set of rules to ensure the maximization of group interests, which is portraying Utilitarianism (Greene, 2013). In fact, too many people have broken this rule to maximize their own interests. These actions are named as egoism (Slote, 2013). Egoists adopt the alternatives which can maximize their self-interests in case of dealing with ethical dilemmas. Now there is a public opinion saying that this problem is the inevitable result of high-speed marketization. Humans today are very much materialistic. Humans believe that money can buy everything, with which humans (especially the egoists) are willing to sacrifice anything or to do anything against morality for the sake of money. Meanwhile, the gap between the rich and the poor is widened. There is a trade-off between money and virtue. When the benefits of being rich increase with the value of money itself, the balance will gradually tilt in the direction of money.

To tell the truth, this statement has its merits, because it reflects the transformation process of interests - resources - own strength, and it is also true. But it is still impossible to agree with it, because human desires are objective, and human beings are free from good and evil at the beginning. In this case, we should accept desire as a kind of normal human nature, because desire is innocent. Therefore, the real bug is that there is no correct persuasion of desire. There is no absolute perfection of the law, because new situations will always emerge - you never know when a wonderful flower will emerge. At this time, it is necessary to stimulate individual self-discipline, and self-discipline is largely reflected in faith, so the root problem of moral decay comes to the lack of faith.

According to the basic theory of materialism, matter is the source of consciousness, that is, your thoughts, even the thoughts of the whole human beings, are actually from what they have experienced (John Jamieson, 2022). In order to be reliable, we need to get more chips, or resources. In an environment where power is almost monopolized, capital is the most representative of resources. As a result, "desires for money and making more money" has become the current trend. Therefore, it can be said that when people start to work hard for resources without credibility, more and more people will resort to all means for capital, and also turn to marketization to carry the pot. In this process, pushing materialism can be said to be the fundamental reason for the state of "credibility without credibility", so it can also be said that materialism needs to carry at least half of the pot of moral decay, although materialism itself is not wrong, but it should not appear in such an environment in such a way. This is also something that many contemporary high intellectuals are easily unable to stick to or gradually become true. The development of society and the progress of science and technology also promote the rapid pace of human beings. Many people like to take shortcuts, and they like to easily get what they want without hard work, so they use their own conditions to do some immoral acts to meet their own interests. These things are obvious in modern times. This is also the key problem of moral loss.

1.1 Problem Statement

Does knowledge represent conscience and morality? Knowledge can modernize society, and it can also modernize weapons in wars. The development of knowledge in Information Technology can ease the sharing of information, but meanwhile, it can also lead to privacy invasion of people, with the abuse of technology application. For instance, the raising privacy concerns from consumers and security in using the social media platforms lead to their

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privacy-related defensive behaviours in the adoption of social media platforms (Eng & Tee, 2022).

Knowledge empowers research and development for invention of drugs to save humankind, but it can also create drugs that kill people. For example, Fentanyl is a synthetic opioid which is up to 50 times stronger than heroin and 100 times stronger than morphine. Fentanyl is a major contributor to fatal and nonfatal overdoses in the United States (Wilson et al., 2018).

With the evolvement of social science and technology, the world has undergone tremendous changes, and technological products and intelligent tools have made human life more and more convenient and efficient. At the same time, it also affects the living styles of the entire humankind. Humans are receiving a variety of information and knowledge from the different sources of mass media and social media platforms, which negatively impacts on teenagers in terms of ethical values. A female teenage was arrested by the police for slashing the throat of an e-hailing driver for the sake of a RM 400 fare from Johor to Kuala Lumpur (Justin, 2022). A teenage is able to attack others just for the sake of a small amount of money, which indicates the critical deficiency of morality among the young people nowadays.

1.2 Research Gap

So, does it affect other people as well? What about the morality level among the intellectuals and high-level talents? Are they gradually losing their conscience and moral constraints? In particular, do some researchers or academicians lack of morality and conscience, will they steal and plagiarize, or use their power or authority to seize other people's research results and honor? This paper conducts research and narratives from these relevant subjects to summarize relevant issues and conclusions, to create awareness about this ethical issue, and to improve the moral drain of high-level talents.

This is a discussion paper in pertaining to the current ethical debate in the education industry with the supporting literature reviews. The authors analyze and discuss in further about the critical ethical issue which commonly found in the education industry. Yet, this ethical issue is always hidden under the carpet and ignored without rectification, which is a critical ethical issue and deserves to be investigated and rectified further.

1.3 Purpose of study

The research aims to explore and discuss further about deficiency of morality consciousness among the academicians and high-level talents in the universities in the world.

2.0 Literature Review

2.1 Understanding Morality and Ethics

Morality can be interpreted as human behaviors that are freely subordinated to the ideal of what is right and appropriate. Morality is associated with ethics from the religion perspectives. Morality derives directly from revelation of God to mankind, as described in the Bible. According to the Divine Command Theory, morality and moral obligations ultimately depend on God and religion (Austin, 2005).

Ethics is concerned about practical reasoning for good, appropriate duties and obligations, values and virtues, freedom and liberties, rationality, and free choice in life. Ethics focuses on principles of humanity to distinguish between good and evil, which will regulate acceptable human behavior (Cathrein, 1909).

Morality guides society on the appropriate behavior of individuals, nations and society as a whole, which regulates relations between family members, seniors and teenagers, employers and employees, rich and poor, men and women, rules and subjects to rule. Furthermore, business ethics investigates the ethical issues in pertaining to corporate responsibility and business practices, insider trading, abusive rights of employees, discrimination at workplace, sexual harassment and etc. In addition, social ethics and morality raise concerns in relevant to

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use of nuclear weapons, recreational use of soft drugs, racism and death penalty (Ljupco Ristovski, 2017).

2.2 Theoretical Perspectives of Morality and Ethics

Morality and ethics aim to achieve well-being of individuals in society to accomplish utilitarian objective (Singer, 1981; Greene, 2013). This is contradicted with the real-time response to ad-hoc situations which arise in a complex world which demands for a rule-based and pattern-directed mechanism to accomplish deontological position (Kuipers B, 2016). Therefore, this creates the two opposing alternative position on the nature of ethics. Utilitarianism aims to benefit the highest number of individuals, whereas deontology emphasizes on duties and rules differentiate between right and wrong (Kuipers B, 2016).

Kohlberg (1984) proposes about the six moral development stages for the mankind:

1. The obedience and punishment orientation stage; 2. The instrumental purpose and exchange orientation stage; 3. The interpersonal accord and conformity orientation stage; 4. The law-and-order orientation stage; 5. The social contract orientation stage; 6. The universal principle orientation stage. Kohlberg's Cognitive Moral Development model is closely related in making ethical decisions of individuals (Trevino, 1986).

Furthermore, numerous researchers discuss about ethics cognition. 1. Four stages of the ethical decision-making process: moral awareness, moral judgment, moral motivation, and moral behavior (Rest, 1986). 2. Six dimensions of moral intensity: magnitude of consequences, concentration of effect, probability of effect, temporal immediacy, social consensus, and proximity (Jones, 1991).

The different theoretical perspectives indicate on how differences in ethical values of individuals impact on the ethical judgment and ethical decision making of employees at the workplaces, which will ultimately contribute/mitigate their involvements of ethical misconducts at the workplaces.

2.3 Moral crisis of high intellectuals and high-level talents

Many high-level intellectuals, scientists and high-level people will do something against morality and style of work. These include Nikola Tesla, Thomas Alva Edison, Steve Jobs, Bill Gates and Freud (shown in the following Table 1).

Table 1: Review about the scientists and high-level talents

Scientists/High-level Talents	Contributions	Sources
Nikola Tesla	Serbian American inventor and engineer who discovered and patented the rotating magnetic field and developed three-phase system of electric power transmission.	Inez Whitaker Hunt (2022)
Thomas Alva Edison	Invented light bulb, the phonograph, and the motion picture camera, improving the telegraph and telephone.	Melosi, Martin V. *Thomas A. (1990).*
Steve Jobs	Cofounder of Apple Computer, Inc. (now Apple Inc.), and a charismatic pioneer of the personal computer era.	Steven Levy (2022)
Bill Gates	American computer programmer and entrepreneur	Britannica (2022)

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	who cofounded Microsoft Corporation, the world's largest personal-computer software company.	
Sigmund Freud	Austrian neurologist and the founder of psychoanalysis.	Martin Evan Jay (2022).

The following are past literature reviews about the scientists and high-level talents, which are referring to the sources shown in Table 1 above. Tesla is the real scientist, and Edison is a money-making capitalist. However, it does not affect the public figure image of Edison as the king of invention. Edison has more than 1000 patents in his life, despite of a considerable part of these 1000 patents are inventions of his employees. Edison is similar to Steve Jobs and Bill Gates. He is more a businessman with great historical contributions and influence. Tesla invents AC power which is low in cost and can be extended to thousands of households so that everyone can access to electricity. Edison's company has already laid out DC power for a long time and invested a lot of money. Edison adopts commercial and political operations and suppresses Tesla everywhere to prevent Tesla from stealing its own market. As a science and engineering student, as compared to Edison (a rich capitalist), Tesla negatively condemned by public. Edison shows how high-voltage alternating current could instantly electrocute elephants. He also creatively invents the "electric chair", and uses his influence to make the government to use alternating current to execute the death penalty to criminals. This made Tesla's image as terrible as today's "Thunder King Yang Yongxin" (Stone, 2009). Desperate, Tesla seeks for research fundings to continue his AC research. After unremitting efforts, he finally succeeded. His contribution to the AC motor is as great and far-reaching as Watt's contribution to the steam engine, and he has become the founder of today's electrical engineering. These half lifetime efforts could have brought him a lot of wealth, but he chose to give up the patent right, secure the civil alternating current, and protect the people all over the world. This is in sharp contrast to Edison, who is keen to apply for patents and even steals others' patents as his own invention king. Tesla never married and died in poverty. Edison has more than 1000 patents in his life, and he wins the Edison Award, the highest award in electrical engineering. Therefore, the literatures above portrays how people use power and money to steal others' research results to achieve their honor and status.

Another case is that psychoanalyst Freud, who discovers of cocaine anesthetics. He finds that cocaine (formerly called cocaine) has the effects of enhancing endurance and improving psychological quality. After dozens of experiments previously, he told his best friend, Bloor, that he had sent cocaine to his sister, Martha and some friends, in addition to taking a small amount of cocaine when he was upset. However, the research on cocaine was hastily interrupted due to the visit to his fiancee who had been separated for two years. After his colleague Carl Kohler overheard Freud's talk about the drug, he made a decisive experiment on animal eyes and demonstrated it at the Heidelberg Society of Ophthalmology. Therefore, Kohler is certainly considered as the discoverer of cocaine local anesthesia. However, in 1884, Freud published a 16-page paper entitled "On Cocaine", which discussed the effects of cocaine. This is also a typical example of the moral loss of high intellectuals and high-level talents.

These early problems have continued to the present and gradually formed a default behavior. So many tutors, professors and lecturers like to directly publish their students' articles and write their own signatures to become their own articles. It can be seen that such type of behavior occurs in any university in the world. These high intellectuals and high-level talents plagiarize or misappropriate other people's academic achievements and research topics by unscrupulous means to improve their own status and interests for honor and interests. They use their authorities to suppress others to put their own names to publish journal articles,

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especially the world-ranking journal publications. Too many things happen in colleges and universities. If you, as the dean, professor, or lecturer of a department, do something so morally deficient, how can you educate contemporary university students? How ironic and shameful it is. The necessary condition of human civilization is the balance between self-interest and altruism. Intellectuals should have the expectation that the greater the ability, the greater the responsibility. However, the era choice of weak foundation and strong enemy, economic priority and special social road has made the utilitarian orientation of cultural atmosphere and the self-interest tendency of life value become the problems that people need to solve today.

3.0 Research Methodology

This is a discussion paper, which reviews, summarizes, debates, discusses and concludes about the issue of deficiency in morality consciousness among the academicians and high-level talents in the universities in the world. Therefore, it is not an empirical research paper.
The researchers adopt a qualitative approach to perform exploratory study in discussing the ethical debates (Moral drain of High Intellectuals) in further with the relevant literature reviews. The research provides a further insight to readers to openly discuss this ethical debate among the academicians and high-level talents. The authors perform in-depth document analysis on the literature reviews, to discuss the ethical debate of moral drain of high intellectuals in the education industry and in the universities. The outcomes of in-depth document analysis produce valuable findings which create awareness for the urgency of Ethics programs and Ethics training among the academicians and high-level talents in the education industry to rectify the ethical issue.

4.0 Discussions

4.1 Ethics of high intellectuals and high-level talents

The methodology adopted in corporations to measure work performance is mainly based on Key Performance Index (KPI), which cultivates an atmosphere and work environment that induce employees to be involved in misconduct. The meaning of "the wealth game" motivates the misconduct behaviors among the employees, hoping to achieve the expectations in KPI in a short-cut way (Wood & Callaghan, 2003, p.211). All high-level talents with high knowledge and technical skills must have both noble moral sentiments and moral norms. What is the definition of talent? Only when we have both morality and knowledge, skills and technology to be recognized as talents. All those who have great talents and are brilliant enough to make contributions to the society must have both a substantial inner world, profound moral cultivation and profound knowledge. Some people seem to be very knowledgeable, boastful and reasonable on the surface, but their hearts are empty and their souls are pale. Such people can never become the climate. Those who look good but have a bad internal environment can never enter the room and achieve great things. Just like the hollow bamboo, its appearance is high and green, but its skin is thin and its heart is empty, so it cannot be used as a pillar because it will break when meeting waves and break when meeting forces. How can it be used as a mainstay?
A real-life context example can be observed from a recent American science fiction action film in 2022 (Jurassic World Dominion). Swarms of giant locusts are decimating United States crops, in which corporate-grown crops using Biosyn seeds are left uneaten, raising suspicions that the corporate-employed scientist created the insects with the intention to monopoly the food supply chain in the United States (Derek Connolly & Trevorrow, 2022). This example significantly indicates that scientists who are deficient in morality can be a source of disaster to the human-kind. This again highlights the importance of a strong foundation of morality among the intellectuals and high-level talents, because they are the

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ones who invent, innovate and change the world. Morality in virtue and talent is not only ideological morality, but also the social value of serving the society. Morality includes political morality and ethics. Ethics and morals include professional ethics, social ethics, caring for public property, hard work and plain living, modesty and prudence, etc. From the perspective of requirements for talents, it shows that talents love their jobs, be honest and trustworthy, abide by laws and disciplines, etc., which ensures the healthy growth of talents and strengthens their self-cultivation, so as to better serve the development of society. With the increasingly fierce competition in modern society, in terms of morality, the psychological quality of human personality has attracted extensive attention. Personality psychological quality is the expansion of a human's natural quality, which directly affects the normal development of a human's other qualities and knowledge abilities. People with good psychological quality can be strong willed and face setbacks bravely. Talent in virtue and intellectuals means talent. All kinds of abilities are knowledge, expertise and the ability to serve the people and society. They show the realization of personal value and play an important role in people's growth. The formation of a person's ability is a dynamic process. In the process of becoming a talent, we should cultivate the ability needed for our own development according to our own characteristics and objective needs in practice. Morality and talent are a complete unity and the key to the quality of talents. They are mutually conditional and indispensable. If there is talent but no morality, there will be a lack of firm direction and good ideological quality, which will cause harm to society. Virtue and non-virtue lack the ability to serve the society and hinder the growth of talents. In practice, we must always adhere to the principle of having both ability and moral integrity. Morality and talent will promote each other and develop in harmony. Having both ability and morality is the organic unity of the two factors of morality and talent, and the two aspects of talent's morality and talent are mutually affected. Morality is the premise of talent. Only with such premise guarantee can talent play its role.

The higher the level of knowledge and ability, the higher the moral level. For example, Madame Curie, Nobel, Qian Xuesen and other great scientists, their outstanding talents have promoted the process of human civilization (Song & Huang, 2018). At the same time, in order to benefit mankind, they have ignored all kinds of dangers and demonstrated their fearless dedication and the noble ideological and moral character of being diligent and hardworking and making the world public. Facts have proved that with good ideological and moral character, people will have a strong sense of responsibility for life and society, so as to constantly improve their knowledge and ability in all aspects. In practice, they will understand and transform nature and society and will adhere to the correct direction to better serve the society.

4.2 New problems of moral deficiency of high intellectuals and high-level talents

At present, it is generally believed that the moral deficiency of high intellectuals and high-level talents is mainly manifested in the theft of scientific research achievements and academic plagiarism. This is a typical problem of scientific morality and style of study. What is scientific morality and style of study? The problems of scientific morality and style of study refer to the anomie of scientific and technological workers in scientific research norms, codes of conduct, spirit, attitude, atmosphere, and principles. Because it is not conducive to the development of science and technology and the correct use of scientific and technological achievements, it is called a problem. The problems of scientific morality and style of study reflect the problems and loopholes in the scientific research activities of the modern scientific research system, which include both the ethical and moral problems of scientific and technological workers at the spiritual level and the research norms at the behavioral level. For science and technology, scientific morality and style of study directly affect the prosperity and development of science. Strengthening the construction of scientific morality and style of

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study is not only the premise and basis for promoting the healthy development of academic research itself but also plays a positive role in promoting the social atmosphere of seeking truth and being pragmatic, and constantly improving the ideological and moral standards of the whole society.

Academic misconduct and scientific research misconduct: such as deliberately making wrong statements, fabricating data or results, destroying the integrity of original data, and tampering with experimental records and pictures. Providing false award certificates, papers publishing certificates, literature citation certificates, etc; Infringe or damage the copyright of others, intentionally omit to refer to others' publications, plagiarize others' works, and tamper with the contents of others' works; publish or disclose the unpublished works or research plans of others or for their own use without authorization, using the manuscripts reviewed by themselves or the information in the funding application; the achievements should be attributed to those who have made no contributions to the research, and those who have made substantial contributions to the research work should be excluded from the list of authors, arrogating or unreasonably demanding the identity of authors or co-authors; multiple contributions for one manuscript when the results are published; to interfere with or obstruct the research activities of others by improper means, including deliberately destroying or withholding the necessary instruments, equipment, literature and other property related to scientific research; deliberately delay the review and evaluation of others' projects or achievements, or put forward unprovable arguments; set barriers to the review of competitive projects or results; participating in or conspiring with others to conceal academic misconduct, including participating in others' academic fraud, conspiring with others to conceal their misconduct, monitoring dereliction of duty, and retaliating against complainants; participate in commercial advertising in the name of academic groups and experts.

In addition to the above behaviors that violate scientific ethics, there are also fake academic qualifications and transactions of fake diplomas, degrees and powers. There is also improper use of data, violation of scientific rules, improper peer relations, and so on. These are the behaviors of high intellectuals and high-level talents that lack morality.

At present, the development of science and culture seriously lags behind the inherent requirements of the development of science and technology, and science and culture are in a weak position relative to commercial culture, which is an important reason why the lack of moral problems of high intellectuals and high-level talents has been repeatedly prohibited. First, there is insufficient respect for the objective laws of scientific research activities, too much emphasis on short-term goals, eager for quick success and instant benefits, and lack of long-term plans and perseverance. Second, the spirit of realistic academic research is seriously lacking, lacking the spirit of criticism and questioning, and the sense of teamwork is not strong. Third, under the influence of the remnants of feudal ideology, the problems of "bureaucracy" and academic hegemony are prominent. Fourth, in scientific research activities involving people, there is a lack of basic respect for people, and the bottom line of research ethics is challenged. Fifth, citizens' academic research quality is not high, and their supervision ability and role in scientific research activities are not strong. These problems have contributed to the moral deficiency of high-level talents, resulting in impetuous style of study and misconduct.

The current society is an era of rapid development of science and technology. In the era of leading big data, many people started to cheat data for the sake of interests and shortcuts. High knowledge talents began to break away from the original foundation to pursue the way of saving time and effort. Research is also slowly changing to “quantitative” research methods first, and most people learn quantitative research methods. What causes this? Because most people like to use analysis software for research and quantitative analysis of research problems, so they only need to use analysis software, instead of using their brains to

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think and analyze, and data can be changed at will according to their desired results, as long as they can make false analysis results. So that more and more people will do this, which is a major issue that needs urgent attention.

In colleges and universities, there are many problems with gaining the honor of articles by their authority. Many professors or deans add their own names to good articles and good research even if they are not the author's supervisors and co-authors. They use this convenient condition to share the fruits of others' honor and achievements with power and intrigue, which is really a moral decay. What is even more ridiculous is that a good article can be added to seven or eight names, and these professors and deans do these moral things behind their ostensible beauty. Another is related to some international journals. You can publish good journals with money to improve your reputation. Actually, the real level of achievements is not high. On the surface, these people are high intellectuals and high-level talents, but behind these gorgeous appearances with lofty honor are ugly souls! This problem has become a common problem at home and abroad. If it continues to develop, more and more people will lose their academic level and the level of high intellectuals and high-level talents.

4.3 How to prevent the moral deficiency of high intellectuals and high-level talents

The lack of moral behavior of high intellectuals and high-level talents is a complex problem. It is difficult to prevent all moral behaviors through institutional norms. Self-discipline of the community of high intellectuals and high-level talents is more important. While strengthening the system construction and punishing the behavior of moral deficiency, we need to vigorously promote moral consciousness and strengthen the guidance of public opinion in the scientific and technological circles and academia, especially attach importance to the moral education of young scientific researchers and academic researchers. We should give full play to the self-discipline of high-level talents, actively advocate the scientific and academic research spirit of being realistic, innovative, free, and independent, and the selfless and honest scientific academic ethics. Only when the research spirit and morality are internalized in the thoughts and behaviors of each member of the scientific and academic research community, and the scientific and academic community has obtained its own moral and ethical ontological status, can the scientific and academic research community have a moral role in regulating and guiding its members, and will not cause its members to make mistakes under the temptation of money and power due to moral confusion and confusion of values.

We should give play to the mutual supervision role of research teams in preventing misconduct in scientific research. The person in charge of the research team has the responsibility to grasp each work link as a whole, clarify the research division and responsibility, grasp the research direction, create a united and cooperative academic environment within the research team, effectively give play to the expertise and potential of all members of the research team, ensure that the research work is conducted in accordance with the scientific research and academic research code of conduct, and conduct effective supervision. We should strengthen the education and guidance to prevent moral deficiency in scientific research and academic research. Universities and research institutions have the responsibility to designate experienced teachers and senior researchers to guide students and new young researchers. They should not only teach necessary professional knowledge, but also teach moral norms and codes of conduct for scientific and academic research. Graduate tutors have the obligation to provide students with various rules and regulations related to the code of conduct for scientific research and academic research, and explain relevant regulations to them.

Once scientific researchers and academic researchers deviate from the bottom line of professional ethics and shake the moral foundation of the Science Building, they must accept the moral judgment of the academic community and the public. “A journey of a thousand miles begins with a single step” (Meet Shah, 2022). Only when young scientific and academic research workers have taken root in science and academic ethics and the fine soil of the style of study from the first day of entering the scientific research building, and firmly abide by the basic norms of science and academic ethics and the fine style of study, can academic life be carried out in the right direction. Otherwise, some academic misconduct will be ruined, expelled from the academic community, and even punished by the law, which may become the end of some young high intellectuals and high-level talents tomorrow. There is a saying in the West that “a good beginning is half the battle” (Daily Proverbs, 2021). Only by learning the first lesson of their academic career well, can young high intellectuals and high-level talents make continuous progress on the journey of climbing the scientific peak in the future.

4.4 Managerial Implications

4.4.1 Methods to strengthen the moral construction of high intellectuals and high-level talents

How to strengthen the moral construction of high intellectuals and high-level talents is a problem that the world has been concerned about. Then it is necessary to carry out comprehensive governance from several basic points by combining education, rules, and regulations, supervision and supervision, legal system, moral integrity, etc., to form a methodology system.

From the education of honesty (not lying) in childhood, to the education of honesty, professionalism, and professional ethics in the stage of college students and graduate students, and even the continuing education of honesty for researchers, managers, and academic groups, it has become an education system. Take the typical misconduct at home and abroad as the negative teaching material, take the model as the example, guide the correct values, and build a cultural environment conducive to integrity and innovation. The government departments shall have effective supervision methods for the administrative agencies and supervise the work of the scientific and technological institutions; Attach great importance to social supervision, and establish and improve a complete system of publicity, complaint acceptance and complaint handling. The necessary protection system for the complainant and the respondent. Establish detached investigation institutions. Use information technology to improve legal and effective supervision means. Strengthen the prevention and investigation of misconduct, and give due administrative punishment or disciplinary punishment to the person responsible for the misconduct verified, so that the violator will pay the necessary price; Those who violate these moral deficiencies and commit fraud and other illegal acts shall be investigated for civil, administrative and criminal responsibility according to law. In short, government authorities should take the initiative to protect the whistle-blowers about this ethical issue, so to ease and rectify this ethical issue.

In addition to the implementation of the above methods, humanistic care and mutual communication are also needed to help solve the problems and difficulties encountered by these talents. It is because their moral beliefs are firmer and their academic accomplishments are more noble. At the same time, it resonates with the social emotion and humanistic emotion, which promotes the progress of moral behavior and ensures the absence of morality. Therefore, emotional communication and humanistic care are also an important way to maintain the moral deficiency. These high intellectuals and high-level talents can feel love from the bottom of their hearts, and abide by the moral bottom line from the bottom of their hearts.

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5.0 Conclusion

The above is the research and analysis on the moral deficiency of high intellectuals and high-level talents. Through the analysis and research of relevant cases and documents, some relevant conclusions have been drawn. It demonstrates how the high knowledge talents make some behavior events with moral deficiency, and finds out the real reasons behind these behaviors. Therefore, modern new talents should have moral quality, knowledge quality, and cultural accomplishment quality, as well as good psychological quality. We must adapt to the competition and cooperation of economic globalization and technology internationalization, and at the same time, highly educated talents must have the globalization and internationalization of language, culture, knowledge and vision. They should also have noble moral sentiments and good psychological qualities.

Although there may be some stagnation or retrogression in the morality of high knowledge and high-level talents in a certain period, the general trend of moral development is upward, forward, and forward along a tortuous path, or called spiral upward and wave forward. It is necessary to supervise and guide the implementation of the system and rules, and also to carry out some moral training related activities to stimulate people to improve their psychological quality of abiding by moral behavior. The problems and difficulties of encouraging and helping these talents with long-term humanistic care and love can let them get recognition and comfort from their hearts. Only in this way can they better ensure that their moral consciousness will not be diminished, and they can make greater efforts to contribute to scientific research and academic research, rather than do some immoral things and behaviors for fame and self-interest. It attaches importance to the overall interests, emphasizes responsibility and dedication, advocates ethical values, attaches importance to moral obligations, pursues spiritual realm, yearns for ideal personality, emphasizes moral cultivation, and pays attention to moral practice.

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The relationship between responsible leadership, green human resource management, environment knowledge and employee green behavior

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Abstract

Purpose: The purpose of this paper is to study the relationship between responsible leadership (RL), green human resource management (GHRM), environmental knowledge (EK) and employee green behaviour (EGB) in an emerging economy. A conceptual framework was built using the social exchange theory.

Design/methodology/approach: The theoretical underpinnings of this study are RL, GHRM, EK and EGB. The study has a quantitative methodological approach using data that was collected from employees working in different industries. One hundred and forty responses have been collected. The analysis is currently being carried out. The current paper is only a literature review.

Research limitations/implications: It stimulates future research in the areas of RL, GHRM, EK and EGB.

Practical implications: The study promises practitioners that adoption of RL can result in constructive EGB.

Originality/value: The study contributes to the area of managerial leadership and fills the gaps in existing literature. The research article is valuable in two key aspects. First, it offers a much-needed theoretical underpinning to the phenomenon of RL such that the phenomenon could be better understood and influenced. Second, it nuances the phenomenon by identifying the relationship between GHRM, EK and EGB, which are yet to be explored together as constructs.

Paper type: Research paper- Literature review

Keywords: responsible leadership, green human resource management, environment knowledge and employee green behavior

Introduction

The subject of sustainability has become a contentious issue in the contemporary world. Organizations have lately found that the availability of natural resources is critical to the continuance of their operations. The depletion of natural resources on which their activities depend will endanger both the organization's ecological and financial viability (Lovins, Lovins & Hawken, 1999). Furthermore, corporate leaders have discovered that a triple-bottom-line strategy that takes into account a company's social, environmental, and economic components is the key to gaining a competitive edge (Lipsky, et.al. 2018). Environmental sustainability has become critical in society and business. Natural catastrophes, climate change, and the loss of natural resources are all a cause for concern. The excessive cutting of trees, the use of fossil fuels, and the generation of carbon monoxide as a result of organisational and human activities are the causes of today's catastrophic environmental conditions. To counteract these consequences, governments, particularly those of poorer nations, have pledged to global movements and established legislation to encourage organisations to follow ecologically friendly practices. Leaders in organizations can play an important role in adopting sustainable practices in their organizations.

The academic topic of responsible leadership RL originated from the expanding research on corporate responsibility (CR) and sustainability. This field, which has its roots in social-relational and ethical theory (Maak and Pless 2006), has grown significantly in recent years, prompting special issues in various academic journals (e.g., Ketola 2010; Pearce and Stahl 2015; Pless et al. 2011a; Scherer et al. 2009).

Yong, Yusliza, Ramayah, Jabbour, Sehnem, and Mani (2019) investigated the impact of GHRM practices on the environmental performance and sustainability of manufacturing organisations. As a result of today's increasing environmental and resource use concerns and the introduction of more rigorous environmental policies in many nations, green employee conduct is being encouraged in more organisations (Cheema et al., 2020; Dumont et al., 2017). According to Wee and Quazi (2005) and Yang, Hong, and Modi (2011), organisations with strong green policies benefit from greater sales and brand awareness, as well as excellent employee outcomes (Salem, Hasnan, & Osman, 2012). Employees are the implementers of an organization's green policies, hence organisations must encourage and eventually change employee behaviour to align with the organization's green aims (Daily, Bishop & Govindarajulu, 2009; Ones & Dilchert, 2012; Ramus & Steger, 2000). Increasingly, firms are embracing GHRM techniques, also known as "HRM components of green management," to encourage green employee behaviour in the workplace (Renwick, Redman, & Maguire, 2013, p.1). Nonetheless, despite a growing body of academic literature regarding the links between GHRM and EGB (e.g., Jackson & Seo, 2010; Kumari, 2012; Renwick et al., 2013), this linkage has not yet been sufficiently empirically investigated.

The present research aims to fill a gap in the literature by investigating the impacts of GHRM on Employee green behaviour EGB, which is defined as "scalable behaviours and behaviour that workers participate in that are related with and contribute to the environment" Ones and Dilchert (2012), p. 87 states that Individual green behaviour outside of the workplace has gotten much more research attention than EGB (Paillé & Boiral, 2013). Furthermore, recent research on workplace green behaviour has concentrated on the effect of corporate sustainability programmes (Paillé, Boiral, & Chen, 2013; Norton, Zacher, & Ashkanasy, 2014) and leaders' influence (Ramus & Steger, 2000; Robertson & Barling, 2013). Environment knowledge EK is the understanding of environmental concerns and solutions (Angreani, Saefudin, & Solihat, 2022). EK explains environmentally friendly behavior. It signifies the amount individuals are aware about environmental issues and "general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems" (Fryxell & Lo, 2003). Levine and Strube (2012) also established that EK was an important predictor of environmental behavior, finding that increased knowledge about the environment may support environmentally friendly behavior and inform that EK is termed as a correlate (and occasionally as an essential precursor) of environmental attitudes.

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This work attempts to bridge the gap by investigating EGB as a result of RL and GHRM, with EK acting as a mediator and studying these variables in the context of the working population in India. Researchers worldwide have developed a common understanding when it comes to RL and how it relates to practical challenges while discussing leadership.

Literature review

2.1 Responsible leadership

In today's globalizing era business leaders face moral dilemmas as they face culturally heterogeneous stakeholders, and they must end up taking decisions that must be acceptable to all affected parties (Maak, 2007). What should not be sidelined while taking decisions amidst a crisis is moral and ethical viewpoints (Brown & Treviño, 2007). A responsible leader to succeed creates a value network (Lord and Brown, 2001) of various stakeholders which in turn increases social capital contributing to a sustainable business. Another important aspect of business leadership is to motivate and satisfy the employees by encouraging them at the same time to engage in citizenship behaviour (Voegtlin et al., 2012).

Being responsible relates to being accountable and taking the onus of one's actions. Responsibility in the context of leadership means being answerable to the decision that a leader takes, it is also presumed that trust and reliability are relational to a leader who is responsible. In a corporation where there is the involvement of multiple stakeholders, being responsible holds the utmost importance as relationships with stakeholders are the center of leadership (Maak and Pless 2006b, p. 39). Building a sound and sustainable relationship with those at stake is what RL deals with. Responsibility is associated with the freedom to articulate one's notion and action which is clearly indicative of the fact that responsible leaders have discretion with respect to exercising authority (Spreitzer, 2007). "RL can be understood as the art of developing and maintaining social and moral relationships between business leaders and various stakeholders (followers), based on a sense of justice, a sense of recognition, a sense of care, and a sense of accountability for a variety of stakeholders" (Maak and Pless, 2007). In past studies, RL was studied with the ethical motivations and values of an individual but in recent studies, much emphasis is laid upon the capabilities and orientation of a person rather than virtues (Miska and Mendenhall, 2018). The role of RL is highlighted and has come into question at times of ethical lapses and corporate collapses since it then comes to the responsibility of the management to mediate what has been done (Fernando 2016; Stahl and Luque 2014; Fernando and Sim 2011). From a comprehensive viewpoint, we can see that RL represents a concept that lies at the intersection of two fields of studies: social responsibility and leadership (Waldman and Balven 2014; Antunes and Franco 2016).

For employees to effectively perform the key employee outcome is organisational commitment and its significance has already been dealt with in leadership studies (Voegtlin et al. 2012; Miska and Mendenhall 2015). The impacts of responsible leaders are dealt at different levels, at the individual level responsible leaders look at their followers as major stakeholders and thereby they use their impression to generate motivation and creativity (Zhang & Bartol, 2010). When dealt with at the team level responsible leaders encourage diverse perspectives which have been seen to improve team performance and increased efficiency (Edmondson, 1999). Further, RL is not restricted only to the actions taken by leaders, but it is also about the tactics that they take which foster culture within an organisation and manifests virtuous behaviour (Cameroon, 2011). Dealing at the societal level responsible leaders manage cultural boundaries with a stakeholder approach (Miska et al., 2013).

Being and doing good in contemporary times is related to creating an impact on things around us by one's action and actions which promotes sustainability and encompasses green

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behaviour is something that falls under the ambit of RL. To the best of our knowledge, limited studies have been conducted which relate how RL contributes to GHRM along with the roles of EK. As Maak and Pless (2011) have already stated that RL centers around accountability, trust and moral decision-making, therefore, our paper tends to highlight the relationship between these constructs leading to EGB and we address it from a corporate perspective. The current study explores RL from an individual perspective and looks at how employees perceive their managers.

2.2 Green human resource management

GHRM is defined by Dumont et al. (2017) as "HRM activities, which enhance positive environmental outcomes" GHRM include creating and implementing HRM practices, policies, and philosophies to support an organization's environmental goals, as well as aiding workers in modifying their behaviour to improve environmental performance (Chaudhary 2020). Kramar (2014) defines GHRM as "HRM approaches that improve positive environmental outcomes" (p. 1075). GHRM highlights the HRM components of environmental management (Renwick, Redman, and Maguire 2013), with an emphasis on the role of HRM in pollution avoidance via firm operational procedures (Renwick, Redman and Maguire 2013). GHRM demonstrates how a firm feels about environmental protection and contains a collection of HRM practices (Mishra, Sarkar, and Kiranmai, 2014) that concentrate on the fragility of ecosystems and the environmental consequences of a company's activity (Boiral 2002). According to Fawehinmi et al. (2019), GHRM supports the use of environmentally friendly resources to improve an organization's environmental performance, boost employee awareness, and demonstrate a commitment to environmental management. GHRM solutions raise employee environmental awareness and promote environmentally friendly behaviours in their personal and professional life, further it promotes workplace sustainability (Fawehinmi et al. 2019). Dumont et al. (2017) opine that GHRM practices create a psychological green milieu that promotes employee green behaviour. GHRM provides employee environmental care and connects GHRM with EGB via social and psychological processes. GHRM indirectly and directly affects in-role and extra-role green behaviour, according to the report (Dumont et al. 2017). GHRM strategies promote green workplace behaviour (Dumont et al. 2017). Since voluntary green behaviour is not formally recognised and graded, GHRM practices may not directly impact it. Instead, they are impacted by people's understanding of the company's green culture, desire to follow it, and everyday green practices (Chaudhary, 2020). As per Chaudhary 2020, GHRM promotes employee sustainability, it may promote employee pride and loyalty to environmental activities, motivating them to work more (Ren et al., 2017) and organizational performance, reputation, and stakeholder pressure improve (Song et al., 2020). It also modulates knowledge to change pro-environmental behaviours (Gilal et al., 2019).

The effect of EK on the relationship between GHRM and EGB needs further exploration. The effect of RL and GHRM on EGB with EK as the mediator should be looked upon in upcoming papers. Prior research has discussed GHRM and its consequence being EGB with EK as a mediator (Fawehinmi et al. 2019).

Despite the relevance of employee transformation to environmental achievement, few research papers have studied how GHRM influences employee behaviour (Fawehinmi et al. 2019) also the relationship between GHRM and EGB is still in its infancy and needs to be explored further (Dumont et al. 2017). Prior research has been conducted in China & Malaysia (Song et al. 2020; Dumont et al. 2017; Fawehinmi et al. 2019) whereas scant studies have been explored in emerging economies like India and Malaysia. Thus, the current study on RL and GHRM on EGB with EK as a mediator proposes to tackle this literature vacuum.

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2.3 Environmental knowledge

Understanding the environment's fragility and value is EK. Knowing how human activity affects the environment and taking remedial action is an aspect of EK. Knowledge is necessary for effective action implementation. EK entails identifying, collecting, developing, and applying information to improve organisational performance and competitiveness (Pham, Thanh, Tuckova,, & Thuy, 2020). EK is the understanding of environmental concerns and solutions (Angreani, Saefudin, & Solihat, 2022; Zsóka, Szerényi, Szechy, & Kocsis, 2013). Suki (2016) defined EK as stakeholders' knowledge of consumable goods.

Green corporate personnel with a favorable environmental attitude and abilities are more likely to participate in eco-initiatives (Anwar et al., 2020). Knowledge, skills, energy, and time can meet environmental needs (Edwards, 1996). HRM practices are the demand side of EK (Ahmad et al., 2021). Farrukh et al. (2021) implies that employees with greater EK levels exhibit pro environmental behavior. Environmentally conscious employees may boost business. Companies employ environmentalists to protect the environment (Gunarathne, et al., 2021). Knowledge may enhance staff engagement, which helps develop innovative goals (Fores & Camison, 2016). Recent research has investigated the relationship between EK and green innovation to minimise environmental impact. Workers' views and expertise often impact organisational goals and the decision-making process. Increased scores on the EK measures used in the study were associated with increased engagement in environmental behaviors (Kaiser & Fuhrer, 2003). EK is an often-used target of interventions with the belief that enhanced knowledge will result in more environmentally responsible behavior (cf. Duerden & Witt, 2010; Shuh, 2004).

2.4 Employee green behavior

EGB can be defined as "employees' engagement in green behaviors, including their actions to perform work in an environmentally friendly manner (e.g., recycling, rational use of resources, participation in environmental initiatives)" (De Roeck and Farooq, 2017). Green behavior can be termed an individual activity that minimizes harm to or benefits the natural environment Steg and Vlek (2009). Green behavior is among those several strategies that are followed by organizations to enhance their environmental performance and achieve sustainable targets (Al Suwaidi et al.,2021). Employees show such behavior as a result of environmental issues such as pollution and resource exhaustion that cause a threat to their life and welfare (Aprile and Fiorillo, 2017). On observing others around them engaging in patterns of behavior, employees are likely to engage in such green behaviors out of a desire to fit in, establish, and strengthen their social relationships according to the functionalist view (Kim et al.,2014).

2.4.1 EGB and GHRM

GHRM considers the environmental performance of organizations (Renwick et al., 2016; Yong et al., 2020). Green-standard hiring, staffing, training, and performance evaluations are aspects of GHRM (Dumont et al., 2017). GHRM rewards employees for green goals (Renwick et al., 2016; Yong et al., 2020; Yusliza et al., 2017), promotes cost-effective green competencies like virtual interviews, online training, job sharing, teleconferencing, and energy-efficient offices (Rubel et al., 2021) and can help employees go green (Chaudhary, 2020; González-Rodríguez & Díaz-Fernández, 2020; Kim et al., 2019). Turning off lights and shutting down laptops and desktops are GHRM practices (Paille et al., 2014). Thus, GHRM can achieve green environment goals by teaching employees in-role and extra-role green service (Jabbour et al., 2016; Rubel et al., 2021). According to research, employee attitudes and behaviours affect company performance (Alfes et al., 2013; Norton et al., 2014). Studies

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show that GHRM affects green employee commitment (Pham et al., 2019; voe et al., 2018; Saeed et al., 2019). Their research also found that green practices make employees more environmentally friendly. GHRM organizations promote green practices and accept them (Khan et al., 2022). GHRM can improve employees' in-role and extra-role green service behaviour and help organizations achieve sustainable environmental management to satisfy stakeholders (Khan et al., 2022). Further previous papers have confirmed that green commitment mediates the relationship between GHRM and EGB (Khan et al., 2022).
First, articulating the organization's desire for green behavior during recruiting and analyzing workers' environmental values throughout the job selection process may boost employee green awareness and knowledge (Renwick et al., 2013). Second, incorporating workers into green activities and providing green training may increase employee knowledge, skills, and capacities while also making them more psychologically accessible to participate in green behaviors. Third, HRM theories contend that employee awareness of the importance and urgency of embracing HRM methods is critical to their efficacy in eliciting appropriate workplace behavior (Nishii, Lepak, & Schneider, 2008).

2.4.2 EGB and RL

RL affects EGB through informal personal relationships between supervisors and employees (Székely & Knirsch, 2005; Waldman & Balven, 2015). It has been found that RL combines leadership with social responsibility (Stander & Coxen, 2017). It has been defined as “the awareness and consideration of the consequences of one's actions for all stakeholders, as well as the exertion of influence by enabling the involvement of the affected stakeholders and by engaging in an active stakeholder dialogue” (Voegtlin, 2011: 59). Instead of subservient "leader-employee" connections, RL emphasizes multi-stakeholder "leader-stakeholder" interactions (Lu et al., 2022). RL provides a pro-environmental model of care and support for green behavior and performance (Afsar et al., 2016). Responsible leaders have the supervisory power to encourage and support employees to engage in pro-environmental activities, including recycling and reducing pollution (Afsar et al., 2016; Robertson & Barling, 2013). RL, which demands leaders to be morally sensitive to stakeholders inside and beyond the firm, has been conceptualized and interpreted as an adequate antecedent of employees' green behaviors (Maak, 2007; Maak & Pless, 2006).

2.6 Social exchange theory

In this study, social exchange theory (SET) helps the understanding of the relationship between superiors and their subordinates, which is an important theory in explaining workplace behavior, which is based on trust (Mousa & Puhakka, 2019). The belief is that, when an individual gives to another, they do so and trust that reciprocation will occur. Unlike an economic exchange. social exchange is not an explicit and contractual engagement (Keller & Dansereau,1995). It can be utilized to explore organizational and managerial subjects such as RL (Cropanzano and Mitchell, 2005). It reflects “those voluntary actions of actors that are motivated by the returns they are expected to elicit from the other” (Blau, 1964, p. 91). It indicates that employees establish a psychological bond with their organization when perceiving care from the organization (Blau, 1964). SET supports the thought that social behavior is governed by reciprocal incentives which influence individuals’ actions in social relationships (Gächter et al., 1996), meaning , the reciprocity principle, which entails the exchange of benefits over time, is viewed as the essential component in the process of social exchange (Moore & Cunningham, 1999). To the best of the authors knowledge, scarce studies have been conducted to elaborate the relationship between RL, GHRM, EK and EGB.

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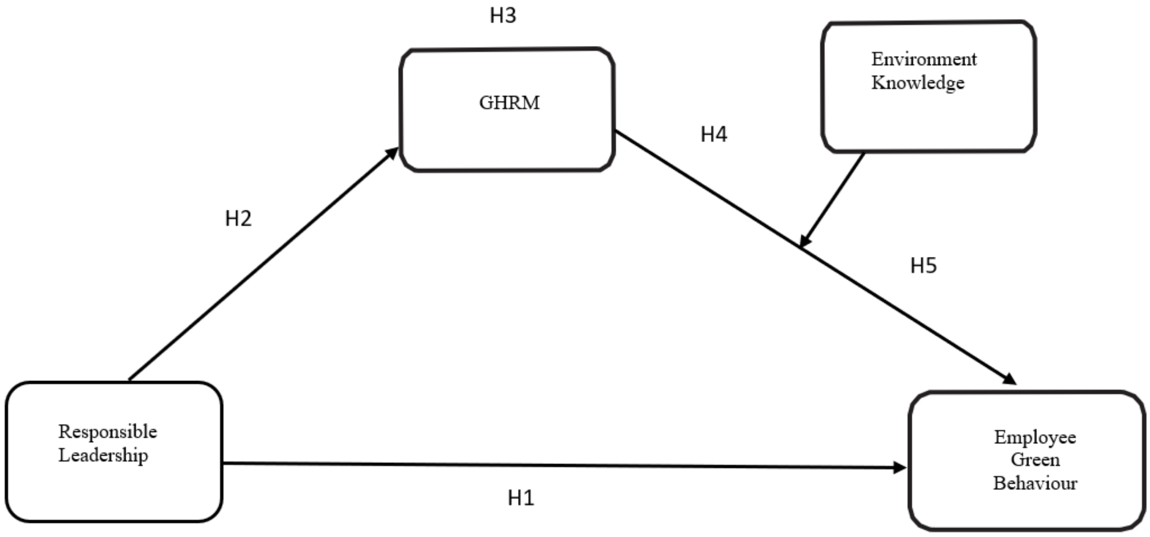
Figure 1. Conceptual model



Hypothesis

H_1: Responsible leadership RL positively impacts employee green behaviour EGB.

H_2: Responsible leadership RL positively impacts green human resource management GHRM.

H_3: Responsible leadership RL positively impacts EGB through the mediation of green human resource management GHRM.

H_4: Green human resource management GHRM positively impacts employee green behaviour EGB.

H_5: Environment knowledge EK moderates the relationship between green human resource management GHRM and employee green behaviour EGB such that higher green human resource management GHRM will lead to higher employee green behaviour EGB.

3. Research Methodology

3.1 Survey instrument development

A structured survey questionnaire based on pre-existing measures acquired from prior academic literature was adapted and utilized in this study and is presented in Appendix A. Four academic experts in the Human Resource Management area with prior academic research in this area were consulted to ascertain that the measurement items measured the proposed construct following which, their feedback was incorporated. This was followed with pilot-testing of the questionnaire with thirty participants to obtain feedback on the understanding of the questionnaire. Data on demographic characteristics of age, gender, hierarchy, tenure in the current organization, current department, industry, number of employees in the current organization and total experience were obtained along with the measurement items. The responses to the variables were rated on a five-point Likert scale between 1 = strongly disagree, and 5 = strongly agree. The questionnaire was developed using Google forms and circulated among students with work experience, students pursuing a part time MBA program, where they were working during the day and alumni of an MBA institute in India wherein a convenience sampling method was employed. The data was

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collected from October to November 2022 to test the model empirically. An online survey questionnaire containing twenty-eight measures and demographic questions was emailed to 700 respondents in Mumbai India. The study's response rate was 19.8% with 139 responses. The data is yet to be analyzed.

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Study of Barometric View of Business Confidence for the Year 2022

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Abstract

From time to time, the world economy faces numerous challenges, and it is essential to know the health of the global economy, especially in the wake of the pandemic, which jitters the balance and creates challenges. Advanced economies have to save capacity, families are sitting on collective investment funds from the widespread lockdown, and central banks are arranging to evacuate accommodation only slowly. The worldwide economy is balanced for the second year of above-trend development, even slower than in 2021. Year 2021 was a year of bounce back and recuperation; 2022 is likely to be a year of moderation for financial development, swelling of the economy, and venture returns. The three fundamental vulnerabilities for 2022, in our view, are 1. The solidness of the spike in inflation. 2. The degree and length of the property market-driven slowdown in China. 3. Conceivable assist COVID-19 lockdowns as disease rates increase once more or modern variations rise. It looks like the recovery of the year 2021 has been overshadowed by the high potency of gloomy overcast, and many risks are beginning to seep in. On the one hand, the United States and European Union economies are activating tighter final and economic measures, and on the other hand, China is facing a melting down of its economy, reflecting the aftermath of COVID 2019. The China meltdown behaviour is activating supply chain concerns, causing supply problems on raw/essential materials.

Keywords: Barometric, view, global wellbeing, business, confidence, 2022 pandemic. Economic sentiment,

INTRODUCTION

Checking barometric certainty levels is vital because it could be an important indicator as a driving force of trade conditions and the global well-being of humankind. Business certainty pushes trade development and venture, underpins business openings, and guarantees reinvestment by businesses in themselves and their communities to maximise the damage done by COVID-19 to the global economy, facing years that keep getting more challenging. Even with a solid global economic growth rate of approximately six percent in 2021, recent struggles in fighting the parade epidemic have resulted in the international business community being willing to think differently about issues around international business (IMF, 2021). The pandemic has harmed growth expectations for many. Looking closely at growth projections from the International Chamber Platform is diverse. South Asian economic events are more affected than those in Europe are, with a less confident outlook by the East African Business Council and the Empires of South Asian Association for Regional Cooperation countries. Somewhat skeptical figures were for China and Russia, whereas more idealistic figures went to the European Union, North America as its entirety, Turkey, and the GCC area. Respondents of Business/Trade from the countries of South Asia, in specific, are setting their development desires essentially lower than the assessments done by World Bank. Whose forecasts for the past versions indicated to be more hopeful than the forecast by World Bank – whereas, for the current year, its forecasted estimations were somewhat

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elevated? Business Community from the EU, which incorporated marginally more hopeful than the World Bank expected on average, Portugal and Ireland appeared specific positive thinking for 2022. With a particular case to MERCOSUR, the Latin American locale showed a more critical viewpoint – and Turkey is too watchfully hopeful for the forthcoming year, whereas GCC was the foremost idealistic with its expectations strikingly higher than the World Bank. (EUROCHAMBERS 2020).

Researchers and members of vital international trade entities conducted a global trade survey in the first fortnight of December 2021. At the start of December 2021, International Trade Council, a global business entity, carried out a survey to provide feedback and quality information to monitor the current international business situation and help forecast short-to mid-term business developments and followed by quantitative statistical surveys quantifying business confidence that proved valuable in unveiling business opinion and forecasting turning points in business cycles. So to provide significant qualitative output from short to medium-term confidence for 2022. Combined with quantitative, factual studies, the output provided meaningful and important output in uncovering current commerce estimation and determining turning focuses within the commerce cycle. During one-to-one with business leaders, it was found that businesses expect to increase prices to cover losses or low profits during COVID 2019, especially in the services sector. An increase in prices would put inflationary pressure. Costs are also expected to increase for raw materials, fuel, wages, goods, and services. As expected that SMEs are keener to increase prices, products, and service lines and apply for loans/debt to drive their business to the higher side (Umpqua Bank Business Barometer Report 2022).

1 Literature Review

There are various indicators which help to measure market sentiment that determine business situations. The Global Economic Survey found conspicuous challenges concerning susceptibilities in monetary markets due to an abrupt rollback of comprehensive financial approaches, upper borrowing costs, and challenges in getting to FDI speculations.

Consumer confidence indicates future developments of households' consumption and saving based on the expected financial situation, the sentiment of the general economic situation, unemployment, and the capability of savings. Economic sentiment refers to words frequently used in economics, and financial value refers to terms related to the rate of interest. Sentiment indicators used in the derivatives market are:

1) Put-call ratio agrees to sell an underlying asset in the future or agree to buy an underlying asset in the future at a fixed rate,

2) Open internet is known as the total number of futures contracts/options that traders hold in a set of time,

3) Moreover, Mix gauges, fear, uncertainty, and volatility in the stock market and indicate an increase in risk. Sentiment indicators in the derivatives market show positioned beliefs for a stock or index (Sheu, H. J., Lu, Y. C., and Wei, Y. C. 2009).

Traders base the calculated approach on the basis of two ingredients; a value between ±one for the sentiment carried by a world based on, fine-tuned sentiment based on calculated in a near future of a nominal of interest and on semantically associated aspect-based words. The sentiment is computed by merging the text of all the articles in the cluster to encompass different economic variables (OECD library)

As of date, COVID-19 has influenced a significant shift in the worldwide commerce environment. The substantial outstanding changes for the Worldwide Chamber Points progressive change in businesses, rising unemployment, and trade closures in their locale. The lion's share of economies, known for their government's monetary support employment, survived during COVID 2019. Higher unemployment remains a significant apprehension for most who show disdain toward

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measures taken. Post-COVID 2019 further underlines the requirement for governments to proceed with supporting approaches. (IMF 2021)

It is often difficult and complex to measure the sentiments or confidence of the economy to determine weakness/strength. Leading indicators represent an accurate signal of recession, during harsh, and diffusion time (Acemoglu, D. & Scott, A. 1994). Confidence in the economy is based on a person's sentiments that reveal essential information related to expectations and the emergence of waves of optimism or pessimism that are shown to be essential drivers of the business cycle (Schmeling, Maik 2009).

The global economic survey sees great challenges concerning a vulnerability in monetary markets due to the recent rolling back of comprehensive financial approaches, more borrowing costs and difficulty in getting foreign direct investment. Lowering world budgetary inflation was a top concern in a version of the Global Economic Survey over previous versions that were concerned with the unemployment issue. When it comes to taking care of the ever-looming danger of protectionism, a comparable assumption for more worldwide participation is reverberated. With the selected guidelines, the number one inclination taken by leaders is to follow the World Trade Organization rules and the dynamic engagement in bilateral, plurilateral, and multilateral exchange transactions. Increasingly companies operating at the global level and involved in seizing the development potential in outside markets face progressively solid competition. The respondents of the Global Chamber Platform accept that the foremost imperative device is to preserve the competitive edge for governments to go ahead with advancement in Research and Development, encouraging the internationalisation of SMEs. The progressive change endorsed by Global Chamber Platform respondents for businesses is focused on their locale. The digital economy is anticipated to produce over $4.2 trillion in 2021; however, it is still a challenge for numerous SMEs, which is why an expansive, more significant part of respondents show that more backing is required from governments for the technology to move to ultimately succeed. Global Chamber Platform respondents, in this way, argue for encouraging the trade of advanced abilities and more endeavours in re- and upskilling the workforce's computerised aptitudes (Schmeling, Maik 2009).

With increasing companies over the globe seizing the development potential in outside markets and confronting progressively solid competition on the worldwide level, the respondents of the Global Chamber Platform accept the foremost imperative device to preserve the competitive edge for governments to advance Research and Development, thereby encouraging the internationalisation of SMEs. To contribute to renew vitality and asset utilization digital transformation and digital workforce is conducive to competitiveness. The progressive change is the most challenging, distinguished by Global Chamber Platform respondents for businesses in their locale. The digital economy anticipated producing over $4.2 trillion in 2021; however, it is still a challenge for numerous pintsize businesses, which is why many respondents show that governments require more backing for the digitalization to succeed.

Global Chamber Platform respondents, in this manner, argue for encouraging the trade on advanced abilities and more endeavours in re- and upskilling the workforce's digital education and skill upgrading. [4].

As the worldwide community adjusts to the continuous COVID-2019 widespread, other troublesome components, such as supply stuns, may have hosted the common good faith watched in the past version of the Global Chamber Platform Worldwide Financial Study 2021. For this year's report, an intermingled picture arises that shifts outstandingly from locale to spot. On occasion, respondents from the South Asian locale set their development desires essentially lower than the World Bank's assessment. Another striking contrast comes from the Federation of Indian Chambers of Commerce and Industry, whose forecasts for the past versions have been distant more idealistic than the World Bank – whereas this year, its estimations are as if they were marginally higher. The European Chamber of Commerce also predicts slower development for its

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locale than the World Bank, possibly underlining that the South Asian locale is more cautious around the movement and recuperation path for their locale within the upcoming year. Global Chamber Platform respondents frame other locales, such as Russia and China, moreover, they demonstrated a more progression and recovery path for their respective regions in 2022 (Global Chamber 2021). There are few positive signals from other districts of the Asian sub-continent. Inside the respondents for the European Union, which incorporates a somewhat more hopeful expectation than the World Bank on average, Ireland and Portugal appear specific in good faith for 2022. The Latin American locale – with a particular case to MERCOSUR, which shows a more critical viewpoint – and Turkey are cautiously idealistic for the coming year. In contrast, the Asian locale was the foremost idealistic, with its forecasts eminently higher than the World Bank. In short, despite solid territorial varieties, there is bashful positive thinking for 2022 among the Global Chamber Platform.

A closer look uncovers that an expansive, more significant part of respondents see emphatically towards the coming year where trade certainty is set to rise for most districts which are in line with the Global Chamber Platform. The South Asian locale and Iran anticipate trade certainty to drop in their locale. Businesses' number one concern is the expanded powerlessness in budgetary markets due to a sudden rollback of the sweeping financial arrangement. Appropriately, the Global Chamber Platform is similarly unequivocally concerned with approximately higher borrowing costs (Global Chamber 2021).

COVID-2019 as of now, in various ways changed the worldwide economy. For the Global Chamber Platform, the foremost eminent change in this respect has been the shift to digitization of businesses and the economy. On the other hand, many economies were constrained to adjust to the advanced digitization amid lack of will and resources to digitization. For many, digitization of the economy is a daunting task as the change was inadequate to avoid rising unemployment, which was the greatest stumbling block seen by respondents. Moreover, the increment of trade closures is another greatest blockade, indicating in reality that not all businesses seem to have adjusted to the advanced digitalization of the economy, and more assistance offered from basic infrastructure creation to assisting businesses particularly for Small and Medium Enterprises is solicited along with overseeing the progress to completion.. (CNBC 2021)

When discussing competitiveness, it is similarly critical to consider the most significant challenges businesses confront worldwide. In specific Global Chamber Platform, see three distinct challenges that businesses in their locale have to overcome. The first is particularly vital for the FICCI (Federation of Indian Chambers of Commerce and Industry) and the North American locale, in bringing digitalization change. Because it appears that despite all the endeavours made to quicken the digitalization of the economy, the change remains a challenge for numerous companies – and especially so for SMEs. Secondly, smaller businesses produce almost 10% of their regular business through online and are not keen to spread out to a higher percentage of digitalization. Businesses ought to adjust their workforce and trade operations to the new challenges due to fast changes worldwide. Third Global Chamber accepts that getting talented staff to digitalization will be the most critical, and infrastructure creators should address this issue on top priority (FORBES 2021). In order to do so, the Global Chamber Platform inclinations the all chamber associations of the world commerce community to guarantee that the instructions need to be given to address the aptitudes deficiencies of the labour force. It is important to mention that the SMEs from Gulf countries, India, and China, and their region need to address the new digitalization reality (OECD Library).

2 RESEARCH METHODOLOGY

Scholars are members of the International Trade Council USA and were crucial in driving the contributions made toward improving the trade. The authors came across a report on a global survey done by the International Trade Council with seven thousand fifty responses from fifty

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countries in early December 2021. Since then, authors have followed rigorously for permission to use survey data to benefit society and the economy.

The continuous follow-up resulted in permission from the council to use data for research communication through this paper. So, to begin with, the authors zero down on the topic, introduction, and literature review to synchronise survey data with the main topic, the global business community, and the economy at large. The council obtained the necessary permission in writing, and this paper results from all these efforts. The author owes deep gratitude to all the executives of the International Trade Council involved in preparing this document and for all those who spent the time to provide their considered input (Chui, A. C., Titman, S., & Wei, K. J. 2010). The survey focused on both developing and developed countries to present a better view as to how the COVID 2019 has affected the entire world and how various regions from both developed and developing countries are making efforts for recovery. The paper looks into where developing countries need to pay attention so that these countries come out as fast as advanced countries. In short, focusing on entire regions and intra-regional would give readers a better picture of how barometer numbers are reflecting a truly global picture.

3 DATA ANALYSIS

3.1 In what country is one located? Multiple Choice List of Countries:

Respondents Demographics 7050

The respondent's demographics show that United States respondents were the highest (26.81%). The United Kingdom was second higher (21.42%), Canada was the third highest (7.94%), the United Arab Emirates was the fourth-highest (6.81%), Argentina was fifth higher (6.67%), Indonesia was sixth-highest (5.96%), Malaysia was the seventh (5.53%), India was the eighths (4.82%), Singapore was ninth (2.70%), China was the tenth (2.13%). Turkey was the eleventh and lowest demographic respondent (1.13%).

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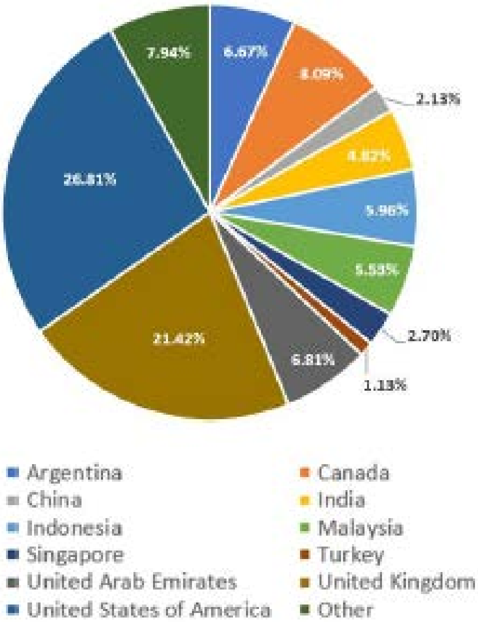
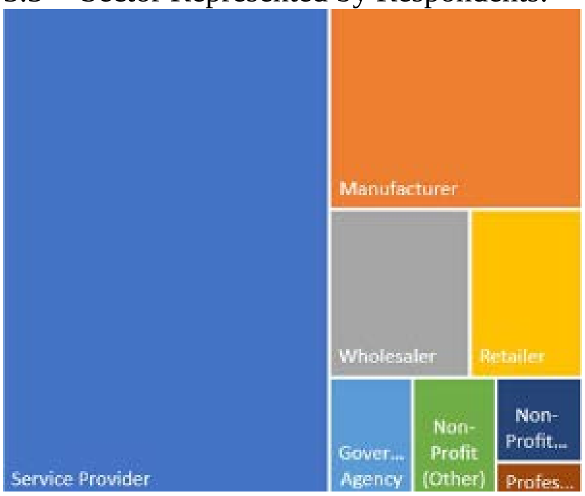
3.2 Country of Respondent- Others



Countries contributing to the archives of knowledge listed as "Others" included Australia, Bahrain, Brazil, Bangladesh, Bulgaria, Colombia, Czech Republic, Croatia, Egypt, France, Germany, Greece, Georgia, Hong Kong, Israel, Italy, Ireland, Jordan, Japan, Kuwait, Kenya, Malawi, Nepal, Latvia, Papua New Guinea, Portugal, Pakistan, Saudi Arabia, Qatar, South Africa, Spain, Sweden, Sri Lanka, Thailand, Tanzania, Uganda, Uruguay, Uzbekistan and Vietnam with a total of (7.94%).

3.3 Sector Represented by Respondents:



Respondents by Sector:

Service Provider	56.31%
Manufacturer	21.13%
Wholesaler	7.23%
Retailer	5.82%
Government Agency	3.12%
Non-Profit *(Other)*	3.12%
Non-Profit *(Charity)*	2.27%
Professional Associations	0.99%

3.4 Current Confidence Level in Global Economic and owned businesses: Survey respondents noted that other organizations' global economic conditions were worse than they were directly experiencing.

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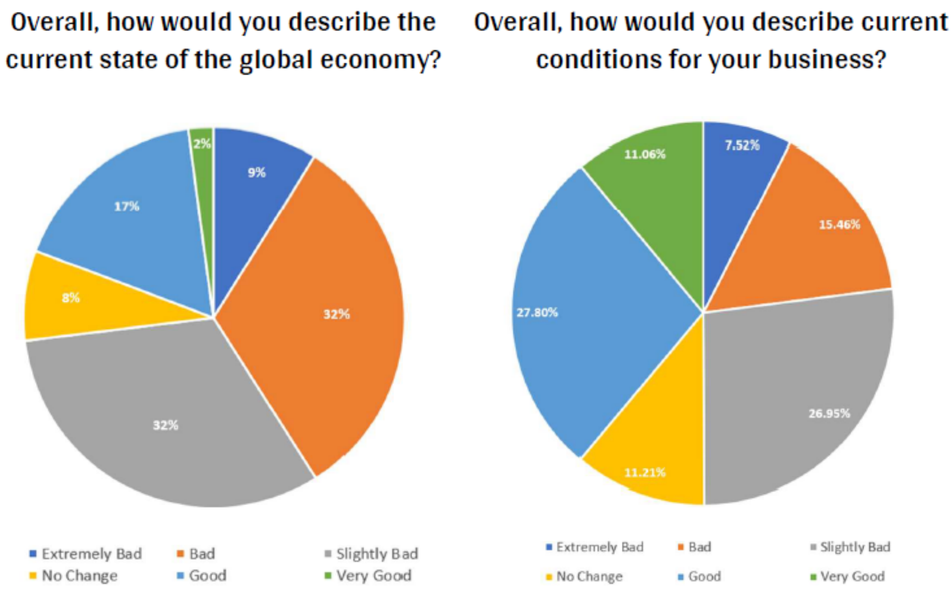
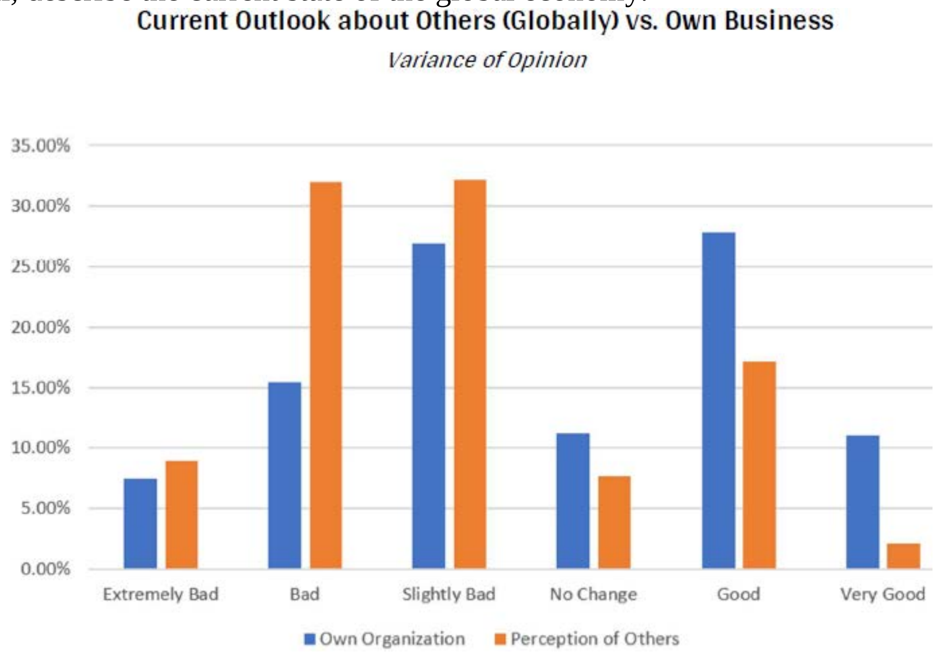


3.5 Overall, describe the current state of the global economy.



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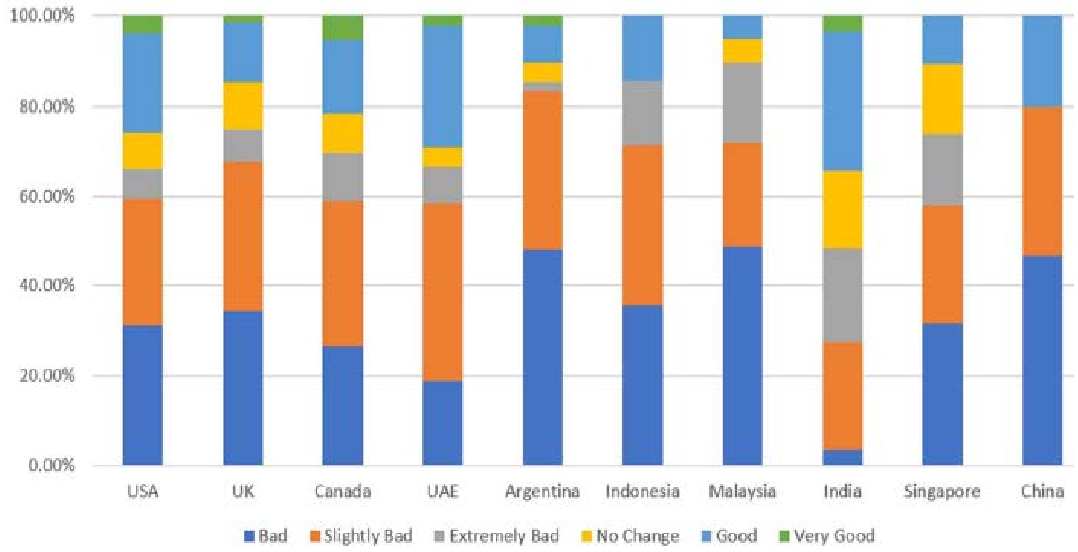
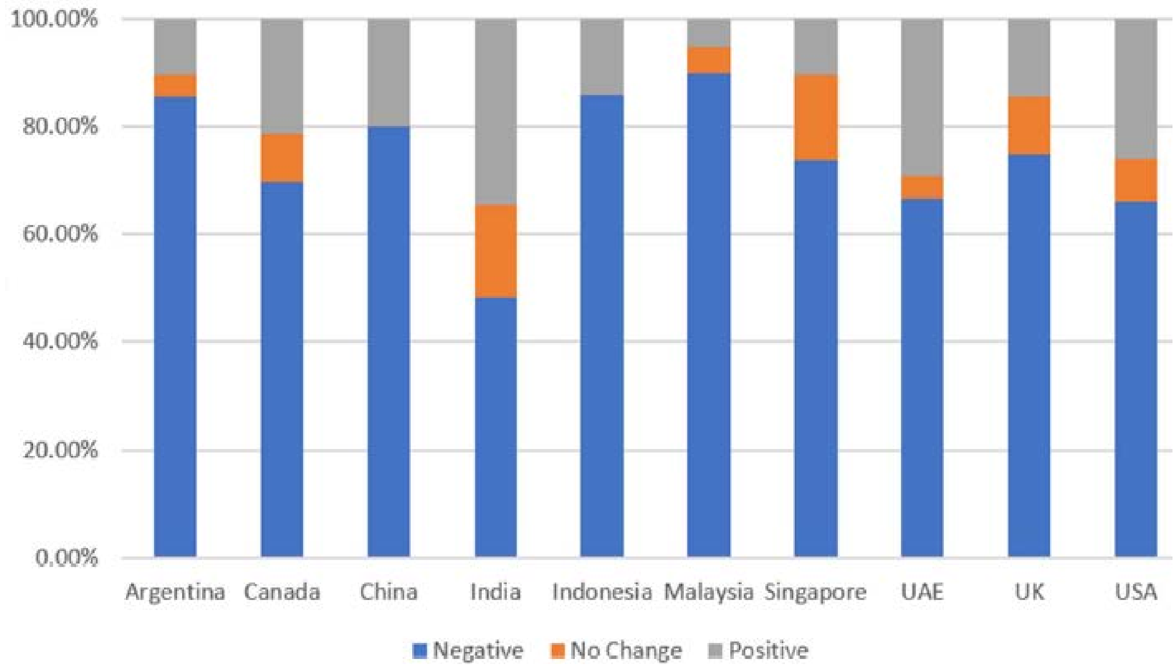
3.6 Overall, describe the current state of the global economy.

Top 10 countries by number of respondents



. Top 10 countries' overall sentiment - positive vs. negative



3.7 How has the Covid-19 pandemic negatively affected your business?

Survey respondents generally perceived the global economic conditions for other organisations to be worse than the conditions they, themselves, were directly experiencing.

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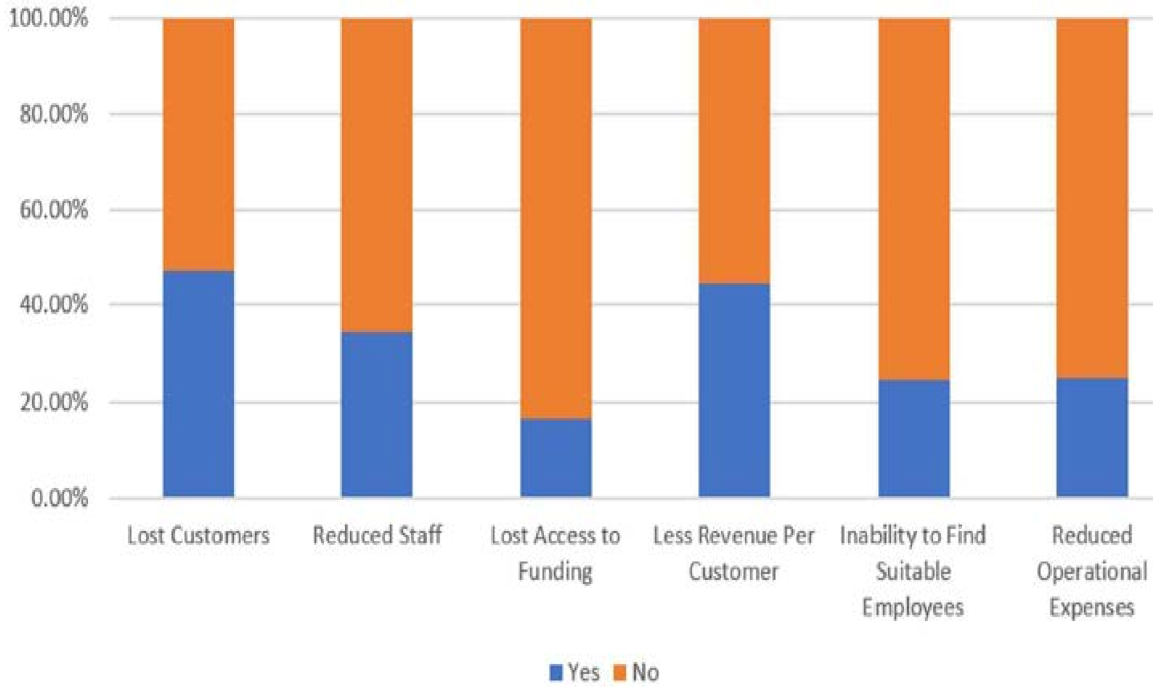
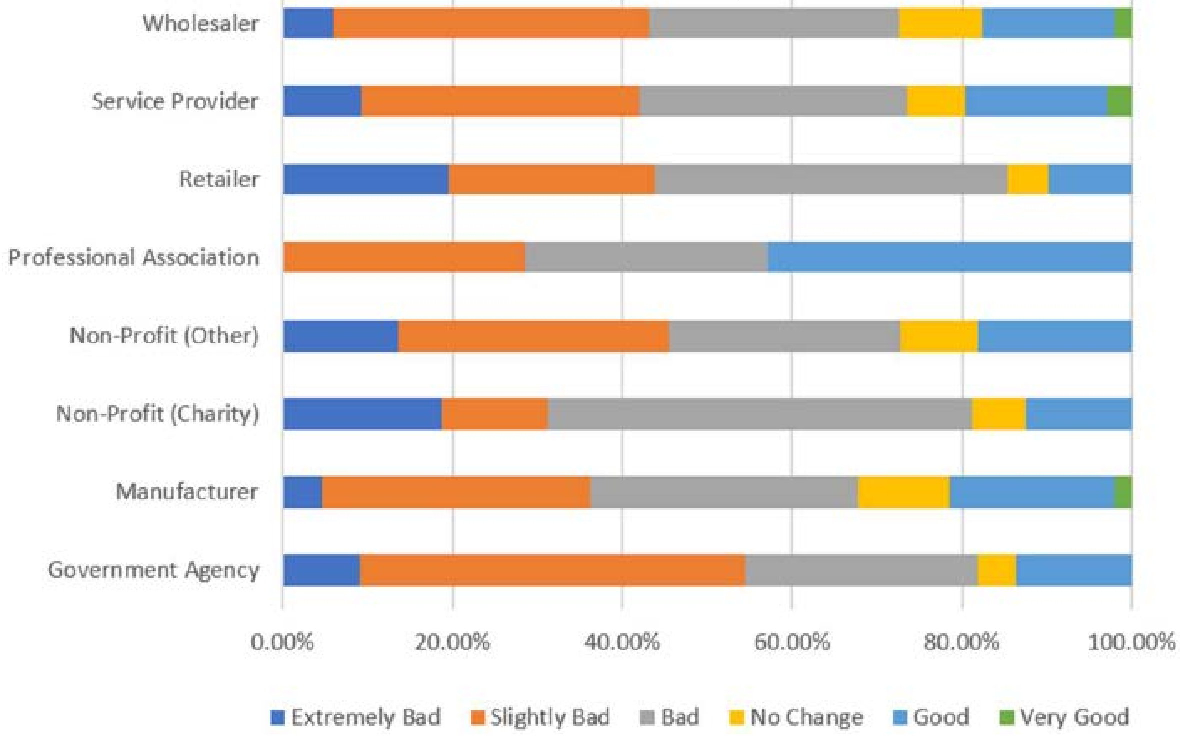


3.7 Overall, describe the current state of the global economy.

Impact Measured by Industry Sector



Overall sentiment - Positive vs. negative

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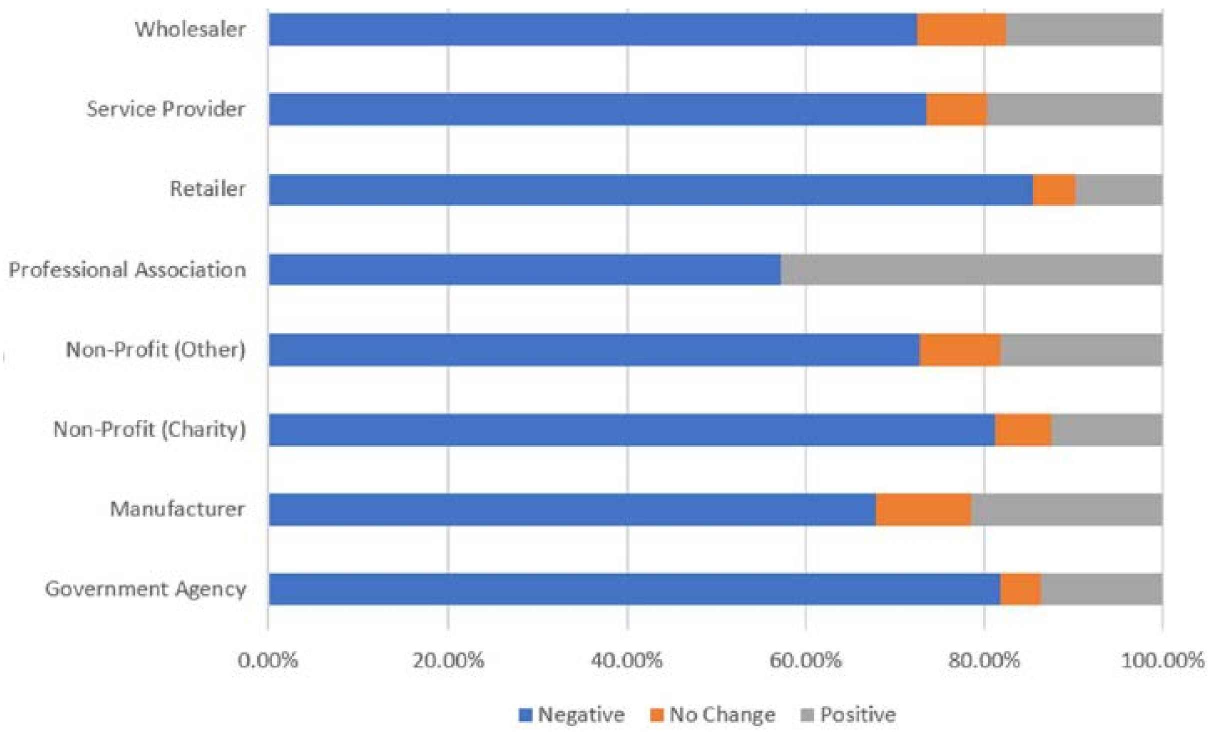
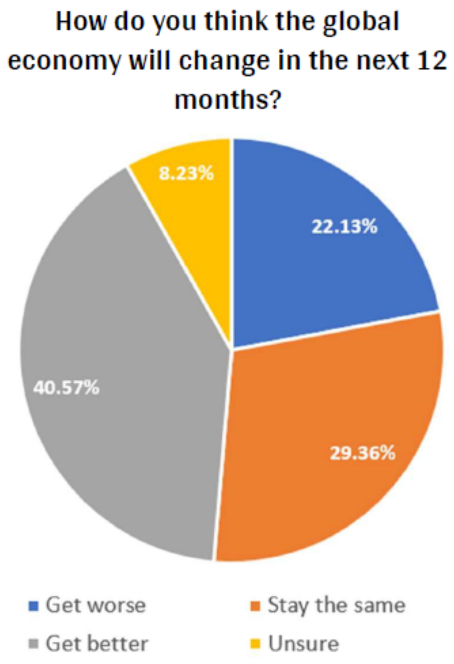
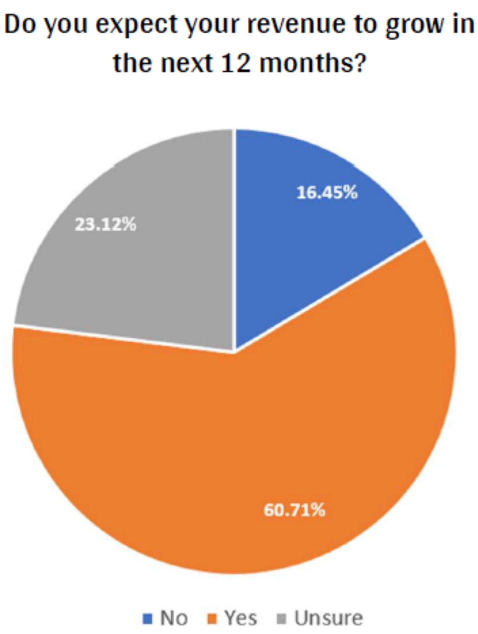


3.8 Future Outlook?

Survey respondents generally perceived that future global economic conditions for other organizations will be worse than the conditions they will directly experience.





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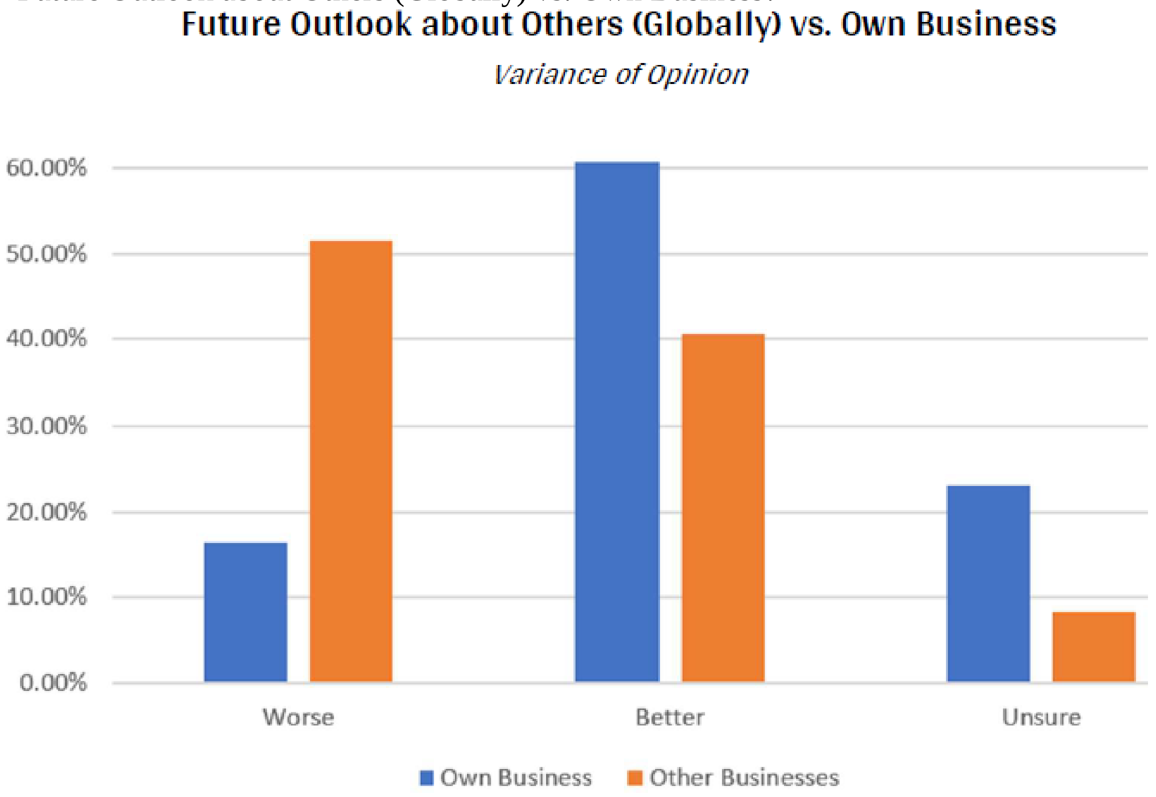
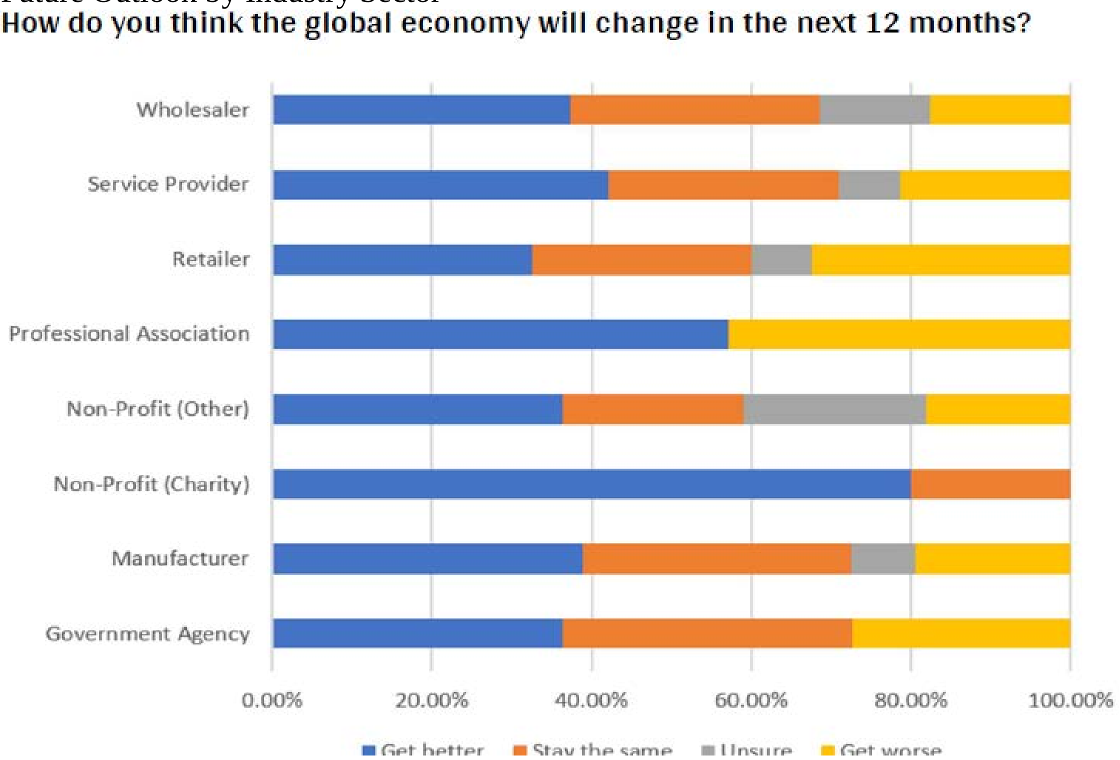
3.9 Future Outlook about Others (Globally) vs. Own Business?



3.10 Future Outlook by Industry Sector



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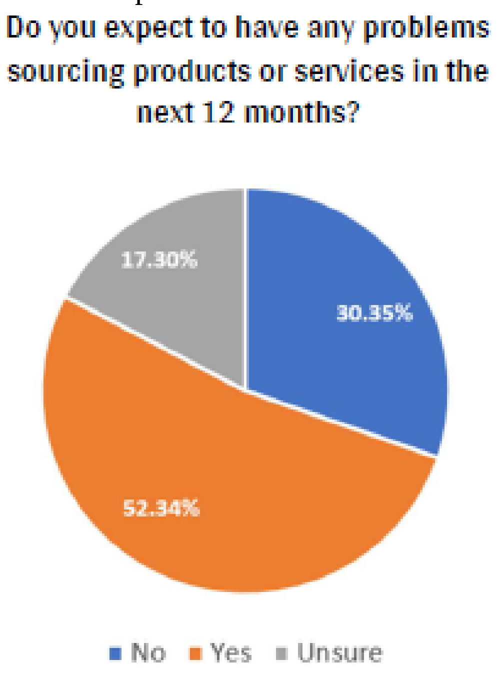
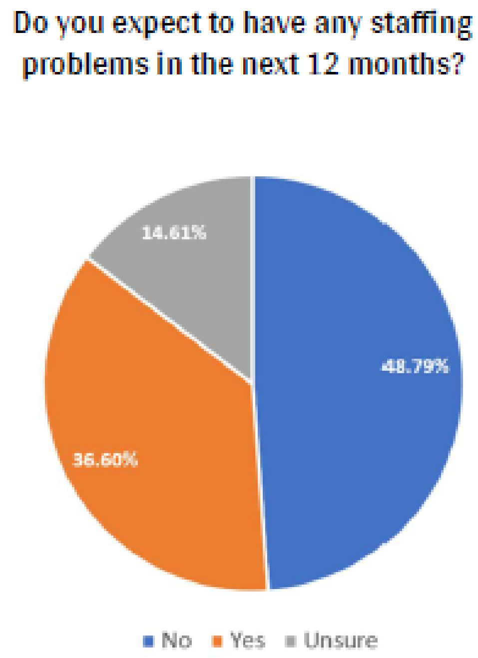
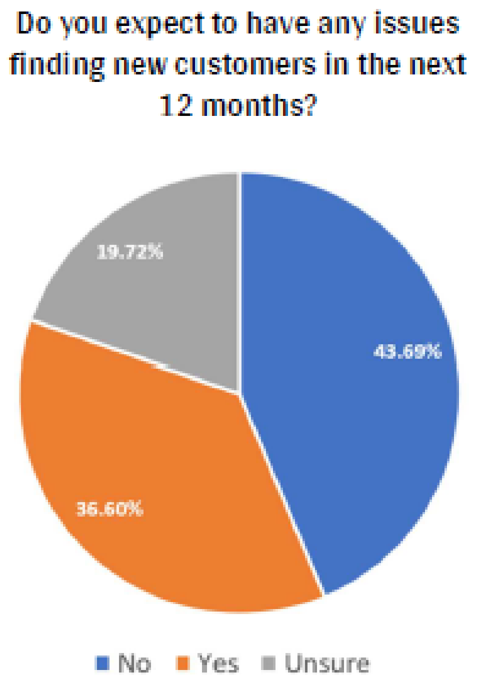
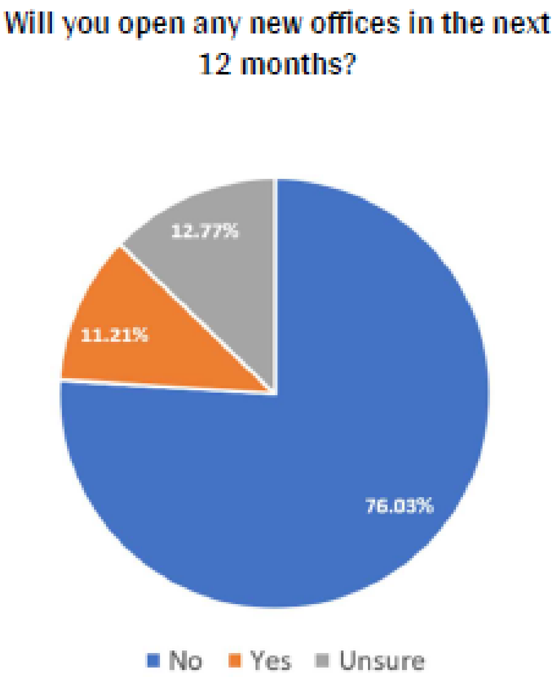
3.11 Forecast Impact for Next Twelve Months









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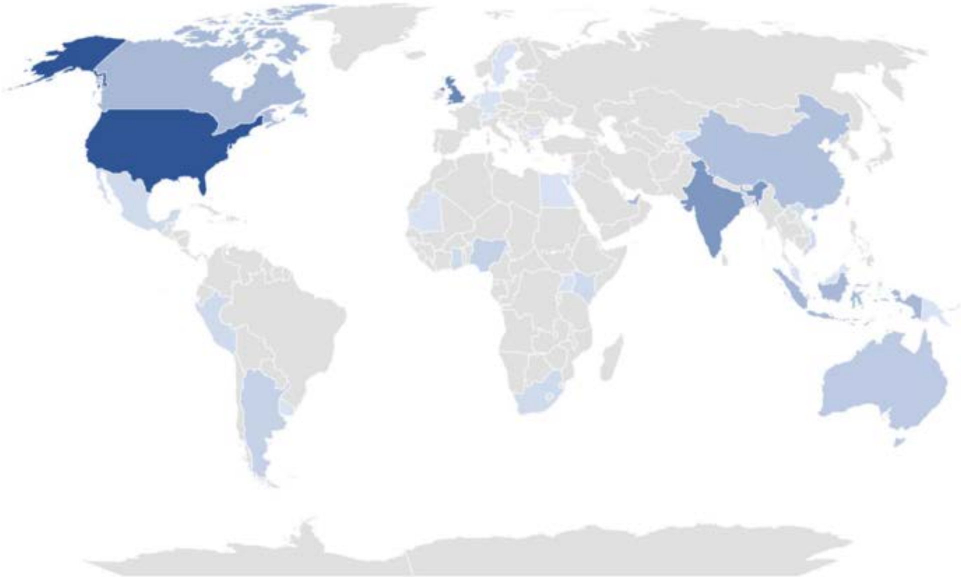
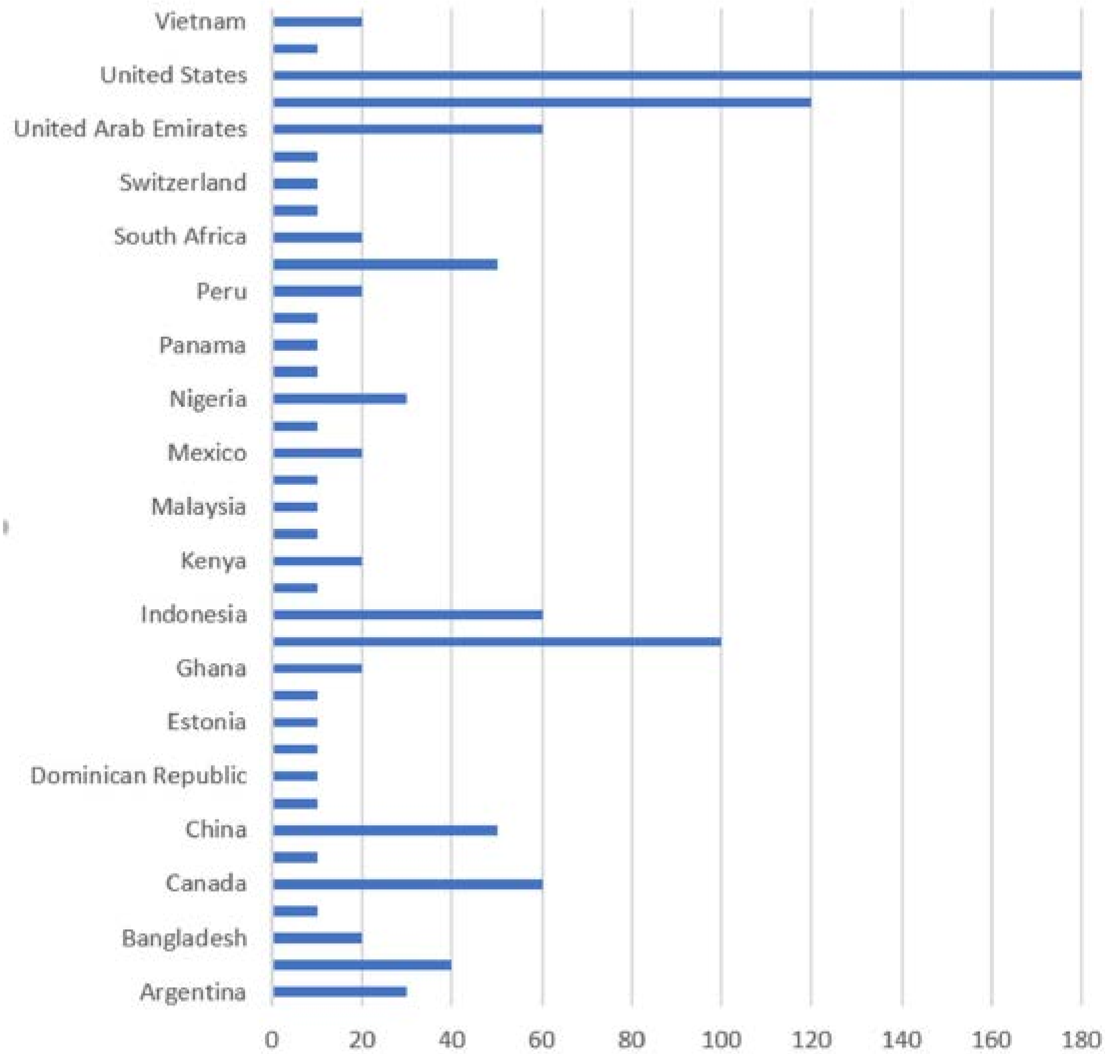
3.12 In what countries will you open an office in the next 12 months?





4 CONCLUSION

Economic sentiment indicators and their measures improve forecast accuracy. Economic sentiment is measured by its strong correlation during the business cycle, particularly for the economy, unemployment, and manufacturing sectors. The sentiment in the financial sector and economic policy regulations tend to change during the pandemic. In particular, the analysis found that the tendency of the financial sector indicator to be harmful during recessions reached a low level of trust, followed by a slow recovery in revenue and number of business transactions. This analysis reflects a low confidence level, which is also qualitatively evident from sentiment indicators, unsolved at different phases of the cycle. Due to mentioned indicators helping discover people's and managers' opinions on economic developments, "lost customers, reduced jobs, lost access to funds, less revenue, less fund, lost jobs, finding suitable employees, reduced running costs that yet not reflected in aggregate economic variables, such as consumption expenditures, employment or GDP.

Monitoring business confidence levels is essential as it is a crucial barometer and a leading indicator of business conditions and the overall health of the global economy. Business confidence drives business growth, and investment supports employment opportunities and ensures reinvestment by businesses in themselves, their staff, and their communities.

Cultural differences play a role in the relative strength of behavioral biases between countries. Moreover, the approach drives certain behavioral biases assumed to generate momentum and handle situations during the pandemic. Moreover, a lack of individualism might drive biases that generate other inefficiencies that lead to an overweight consensus opinion.

Findings are in line with discussed sentiment negatively and forecast aggregate returns across respondents of illustrated countries. When sentiment is high, the future tends to be consumer confidence aligned with individual investors, affecting the forecast for 2022. This relation holds for returns of value to business operations, growth, and different forecasting horizons at an international level.

The behaviour of economic time series becomes characterised differently in periods of economic recession. Economic fundamentals behave differently in periods of hyperinflation and "normal" inflation rates. The rate of inflation in household behaviour, such as income allocation between consumption and saving, changes depending on tax policy regimes, which results in the economic behaviour of financial growth or stability to the financial crisis.

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The Success and Failure of A Joint Family Business in India

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Abstract

This case highlights the rise and fall of a joint family business and the fourth generation of the family is now considering reviving the business after two decades of non-functioning as a joint family business**.** VLT Ltd. had been declared a sick company by BIFR (now National Company Law Tribunal) in 1995, and their debts had accumulated to crores of Indian rupees over the years. By 2015, all the debts were paid off, and the business operations had been completely discontinued since 2000. The second generation of the family-run business has become too old to continue the business, which was at one point in time very successful. Today two of the brothers of the third generation are keen to revive the business with the help of their children, who are now fresh out of management college. Can this be feasible based on the dynamism of the business environment and the history of the family to run a joint family business?

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The Relationship between Social Media and Women's Entrepreneurship in the United Arab Emirates

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Abstract

This paper investigates the correlation between social media and Emirati women's entrepreneurial journeys. This paper emphasizes the role of social media and the impact of using the most preferred types among women entrepreneurs in the United Arab Emirates. The focus of this paper is to see how social media impacts Emirati women's entrepreneurial success or failure and the factors that contribute to Emirati women's increased usage of social media. The method of transforming traditional convictions related to women and how women's rights in full citizenship are accomplished is inspected utilizing strategies for correlation with the past circumstance in the UAE, techniques for investigation, and definition. The research also looks at how far we have come regarding the social and economic change in the previous ten years. It also follows the argument of the various phases of Internet growth before it concludes. In this exploratory research, you will find that its attempts to identify the motivation factors which has embraced the utilization of social media, and this has seen the rise of social media as a marketing tool rather than a social platform, especially when the pandemic of COVID-19 struck in 2020 women used it as a tool to continue supplying their services and selling their goods when the lack down happened. Still, the distribution services were available only then, so it was the only way to deliver the goods to online customers. Therefore, conducting this study shines a light on the practice among entrepreneurs. The UAE's social and economic environment has changed dramatically over the past ten years.

This situation turned into an opportunity for empowering and influencing women in UAE society. They obtained the necessary changes and tools to achieve professional self-realization using the benefits of innovative progress involving social media and various methods in the field of digital marketing. The research proposes looking into the growth of female-led entrepreneurship through social media. The investigation's findings are based on the results of surveys conducted by government and non-government organizations, which are used to focus on the current situation. The use of social media has been speedily boosted in the UAE. Instagram, Facebook, YouTube, Snapchat, and Twitter are the social media representing a basis for the study. Different kinds of social media are prevalent among UAE

residents' exposure to the benefits of innovative progress. Social media represents an endless source of news and helpful information.

The applications for message exchange are also an integral part of the lives of people in this region. Social media has become a source of information among women, encouraging them to pursue entrepreneurship. About (YouGov 2016), around 70 percent of residents in the United Arab Emirates (UAE) have stated taking guidance before making any purchase decisions from social media.

Some UAE women have some social phenomenon barriers where some families do not allow do not women to communicate directly with people, especially men. So, forthrightly mention that they used Instagram & Snapchat as it is based on video & pictures, and there is a space where they can write some information about their goods or services in a way that if they want to show themselves or only their product.

Keywords: Women's entrepreneurship, Women Empowerment, Sustainable Development, small and medium-sized enterprises; UAE women; United Arab Emirates, Instagram – Insta -, Facebook, Snapchat

1. INTRODUCTION

Women play a vital role in society, from the family unit to state-level economic growth. They are in charge of various items, including household output, and they play a significant role in a country's economic development. This can be accomplished through multiple programs, including schooling, nursing, jobs, and even the purchase of growing children. Their cultural differences, on the other hand, have been present throughout their progress.

Culture has been described as a social phenomenon that covers a wide variety of phenomena in human societies that are transmitted via social learning. Language, symbols, social structure, customs and rituals, arts and literature, economic systems, and government forms are among the elements. Cultural barriers, which differ from one group to the next, are one of these components. While some of the cultural elements are progressive, others are retrogressive and hinder women's economic development and progress. Most developed countries have few cultural barriers to gender equity and empowerment of women. However, most third-world countries still lag in instituting cultures promoting change, particularly women's empowerment.

This study argues that women in developed countries Such as UAE have their best hopes in overcoming cultural barriers to empower them against gender equality. Religion and culture play a significant role in UAE society, especially regarding women's roles. This makes it difficult for Emirati women to develop their entrepreneurial skills while writing the needs placed on them by their families and society.

1.1 Women Empowerment

Empowerment is a notion that describes the ability to be in charge of one or several aspects that concern general life activity. It may also be defined as a multi-dimensional social process that is presented in the ability to control one's own life: as an individual or a group of individuals. This can be accomplished by putting forth every one of the necessary attempts on issues that they trust are fundamental to achieving their objectives. Eliminating restrictions on women's rights and freedoms may become a prerequisite for their professional self-realization, increasing the number of women-led businesses. Empowerment occurs on several

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levels, including social, economic, and political activities. It is difficult to define challenging rights in a particular way due to their physical inferiority and restricted social roles.

1.2 Sustainable Development

Sustainable development often arises from people's perception of development. Development may be viewed within two significant dimensions: economic and social. Even though they are almost directly linked to each other, they do not fully reflect each other, so it is possible to assume the gradual approach to both dimensions when development as a process is concerned. As such, the economic development of empowerment was fundamental in the first half of the 20th century, while the second half of the century was mainly concerned with the development of social charge. This resulted from increased awareness about society's growing gap between the rich and the poor. The same period saw growth in the need for environmental protection. The UN Women (2014) argues that sustainable development should have at least three pillars: Economic development, social development, and ecological conservation. The goal has also shifted to convergence among the three trajectories of economic growth mentioned above. Therefore, achieving sustainable development is possible once the three elements are satisfied. Due to government interventions, women have been participating in the labor force in more significant numbers.

1.3 Women Entrepreneurship & Economic Growth

As indicated by (Preiss & McCrohan, 2006), 0.29 percent of women lately would do well with access to schooling. Their participation in the workforce has expanded (Abdulla & Ridge, 2011) give indicated by information from the International Labor Organization (ILO), 31.60 percent of Emirati women between the ages of 15 and 64 are working. In 2011, the workforce included people aged 15 to 25. Emirati women have taken advantage of the circumstance. Regarding structure and economy, including the progress of its citizens, the UAE is an illustration of a quick and fruitful improvement story and a practical, compelling story in the region. The development and rising popularity of Emirati women as partners and contributors in this extraordinary nation-building process is the most precise illustration of the UAE's achievement. Women make up 49.3 percent of the population. `as per the 2005 Census, the UAE's national population has been at the forefront of the workforce in both the government and private sectors. Women's role in the UAE has developed with the understanding of the social occasion with the country's advancement since the league was laid out in 1971, the account of the government's commitment to empower women and provide them with education & equal opportunities for men. Women in UAE have become a fundamental piece of the UAE Workforce and effectively add to the nation's administration and economy, progressively confirmed throughout the country. In the context of women, in the United Arab Emirates, women exceed men at a certain level of learning. Women represent % of higher education students and 70.4 % of overall alumni on average (MFNCA, 2008).

Women in the UAE are doing admirably in business, with the Businesswomen Council's 12,000 members overseeing 11,000 investment ventures costing Dh12.5 billion (US$3.17 billion) in trade, industry finance, real estate, tourism, fairs and exhibitions, building, and services (United Arab Emirates Yearbook, 2010). As indicated by the United Arab Emirates' burgeoning economic activity (MFNCA, 2008), as confirmed by the percentage of female involvement in the UAE economy overall, it is a national imperative for women to add an improvement cycle *(Table 1)*

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Table 1: Percentage of the UAE women's participation in the economy

National assembly	22.5%
Decision-making leadership position	30%
Government sector	66%
Workforce	25%
Free business	4.5%
Boards of directors of chambers	15%
Small and medium enterprises	30%
Number of business women	11,000
Savings	More than ten billion USD

(Source: http://www.uaebwc.ae/en/index.php)

Women in the UAE have an enormous association in government and small & medium enterprises. Likewise, they have a decent part of decision-making leadership positions, demonstrating that women in the UAE are a factor in increasing its development, economic growth, and sustainability.

1.4 What is social media?

The internet has transformed the living of societies around the world with a wide range of services that people can use, such as exchanging photos, videos, stories, blogs or posts, etc., and this is used not only by individuals but also companies & educational organizations around the world (Carr, C. T., & Hayes, R. A. 2015).

Social Media platforms are rising very fast, and it is a field that is deeply rooted in computer science and social science where it created a vast number of different communities and big data of information from all over the world (Zafarani, R., Abbasi, M. A., & Liu, H. 2014).

Carr, C. T., & Hayes, R. A had defined social media as a part of the internet with multiple tools depending on the individual's choice of using the social media platform. Social Media refers to a wide range of internet-based and mobile services that allow users to participate in online exchanges, contribute user-created content or join online communities—mentioned that social media is a type of online discourse where users can create their content and share it and network at an extraordinary rate (Asur, S., & Huberman, B. A. 2010). A UAE hospitality Industry did research using a market intelligence firm where they discovered that 46 percent out of the 13,000 social networking users surveyed between the ages of 18 and 65 were UAE users in the past year. This illustrates that users in UAE had the second highest rate of membership of social networking sites in the world upfront both of US and Canada (Menon, V., 2008). Reference to (Paridon & Carraher, 2009), social media is a cost-effective method for marketing activities.

Engaging in social media will strengthen brand insight which will uphold brand building. An organization is more alluring to clients and current and potential staff. Therefore, it has a well-built brand name; social media will assist with building a decent standing for a business association. A few words can depict a brand in the shopper or business space. They are making a brand that supports the brand in the shoppers' personalities. Through online entertainment, the organization can over and again keep the brand name. Clients experience brand honor while utilizing an item or administration and interfacing with an organization (Carraher, S., Parnell, J., Carraher, S.C., Carraher, C., & Sullivan, S. 2006). This is where

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social media assumes its parts. It was the cheapest promoting and publicizing strategy; likewise, it offered clients a dependable brand. Social media permits two-way interaction among brands and clients and empowers clients to respond to their client's interests. Accordingly, assuming no reactions from the business about the circumstance, the clients would consider the organization questionable. Furthermore, the organization would lose brand faithfulness and believability. Social media is not just a spot to showcase the items and services of a firm yet additionally a spot to cooperate with clients to attempt to tackle their concerns. Social media is currently a huge player in many people's business lives (Carraher, S., Parnell, J., Carraher, S.C., Carraher, C., & Sullivan, S. 2006).
On the off chance that we discuss social media, the famous sites are Facebook, Friendster, and Myspace, which authorize their users to add their content (Kaplan, 2012).). News collection and online reference websites are also part of the Social Media category (Elavsky & Elavsky, 2011). Several authors consume that social media is a series of platforms, including Twitter, YouTube, Snapchat, and Instagram, as well as reality television (Hurley, Z. 2019)

1.5 Social media in UAE

New topics and conversations occur daily through social media in the UAE. About UAE Social Media Statistics 2022 (*Table 2)*, the number of *Internet users* had increased to 9.94 million compared to the previous year's users. There was a 1% percent improvement as people use the internet for many things, not just social media. In the UAE, social media has compromised and got famous in many ways. The perception rate had reached 99 percent, which is considered the highest in the globe. People in UAE spend on average 3.04 hours daily on social media. In addition, many *social media users* have jumped to 10.65 million in 2022, with 106 percent of the population using social media. Active social media users are rising and will reach 8.2 percent in 2022, up 810,000+ from 2021. Social media has become an essential daily feature on the internet. Users in UAE have been moved from standard desktop computers and got into more mobile devices as smartphones and tablets gave them wide usage by combining calls, mail, internet, and social media in smaller and lighter devices. *The number of mobile internet users* has enlarged due to the use of social media as there are more than 9.18 million users in 2022, which is considered 82.4 percent of all Internet users (UAE Social Media Statistics 2022 | Most Popular Platforms | SMM Dubai)

Table 2: UAE Social Media Statistics 2022

Total population	10.04 million
Active social media users	10.65 million
Number of Internet users	9.94 million
Number of Mobile Internet users	9.18 million

(Source: https://www.theglobalstatistics.com/uae-social-media-statistics/)

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2. LITERATURE REVIEW

Some researchers mentioned that women's entrepreneurship has concerned developing consideration lately as substantial proof of the meaning of new business creation monetary and improvement. Besides, (Verheul et al., 2006) added that not solely does female businesses add to economic development and employment generation. However, it is dynamically seen to update various businesses in any financial framework. Women business visionaries seem, by all accounts, to be persuaded to go into their own business to be their boss, to land position fulfillment, for monetary freedom, or for a possible chance to be more innovative. (Kandasaami and Tibbits, 1993). Using different social media and Internet platforms is essential to modern digital marketing. Entrepreneurs use these tools as the primary way to promote their services and goods (Papińska-Kacperek & Polańska, 2018). Moreover, women entrepreneurs in UAE shifted to using online platforms while the Covid 19 Struck hit. Arabian Business (2021) stated that more than a third of entrepreneurs in the UAE had increased their digital marketing activities to attract more customers as they look to adapt to changing business needs during the coronavirus pandemic, according to the global website enabler GoDaddy. They depend on the available apps such as Instagram, WhatsApp, Snapchat, Facebook, and Twitter to sell their goods and services. It is undoubtedly an opportunity to develop business in an interactive environment that allows women to avoid difficulties opening physical stores and businesses if they have any cultural or financial issues or use it as a solution. At the same time, the lack down has happened since the strike of Covid 19.

UAE women determine their skills in the area of digital marketing by using social media to attract attention to their businesses as it is considered a part of an online business approach that they have newly adopted, so particular internet resources turned into a platform for online sales of services and goods. The presence of an opportunity to communicate via social media turned into a way to attract the target audience (Erogul & McCrohan, 2008). UAE women make every effort to create informative content, to attract more loyal & returning customers who trust their content. At the same time, successful entrepreneurs have an opportunity to sell goods all over the world. This detail allows them to expand their business. Consequently, social media are the primary tool for eliminating different kinds of limitations based on gender in Muslim society (Hanan et al., 2015). women can enjoy self-realization, empowerment, and profit from the business.

3. RESEARCH METHODOLOGY

In this exploratory paper, the researcher highlights how vital social media is in the influence of using several types of social media by women entrepreneurs in the United Arab Emirates. The researcher depends on reading many literature reviews, data, and observations to understand the impact of social media and the elements that cause the increased number of social media users. The paper presents methods for visualizing data that are simple to comprehend. The results of the study can turn into a motivation for the authorized state institutions to support the desire of the UAE women living in the UAE to develop their business and enterprises skills and give them the needed support and training for using social media to take them into success not only locally but also internationally. Due to the low level of awareness on this topic, the study of women entrepreneurs in the UAE will serve as a base for research. At the same time, with each passing year, it becomes more critical. The importance will be a base for new rules and facilities to help these women grow up more.

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4. DATA ANALYSIS

4.1 Correlation between Entrepreneurship and social media

Women businesses in the UAE try to examine the advantages of utilizing online media. They attempt to incorporate their insight into an interaction focused on the production of business systems (Effing, Van Hillegersberg, and Huibers, 2011). They become bloggers to attract the audience's attention by showing their goods or services to give them a feeling that they have to have it too. This approach is the primary way to attract a new target audience (Slaughter, 2007). They can use their followers as potential clients, which is why every blogger markets their accounts by the number of followers.

Furthermore, such an approach can become a requirement for the high demand for goods and services (Strong & Hareb, 2012). Instagram turned into the most effective digital platform for developing business. This point is especially evident regarding bloggers with a multimillion audience from the UAE (Pinaroc, 2009). These women became celebrities. They can share their views and thoughts by obtaining the audience's support. Such an approach positively impacts the business (Iqbal et al., 2020). At the same time, the women express the desire to improve their skills in the area of digital marketing. They can overcome financial distress and socio-cultural challenges (Saud et al., 2015). Social media turned into the primary tool for professional self-realization. Digital progress eliminates restrictions and disadvantages (Jenaibi, 2013). UAE women obtained unlimited opportunities to improve their projects

4.2 Changing traditional Beliefs amongst women in the United Arab Emirates

UAE families are considered to focus on devotion, personality, monetary possibilities, and economic well-being. Women in the Emirate have developed almost equal duties to males in increasing social media usage amongst themselves (Effing, Van Hillegersberg, & Huibers, 2011). The women entrepreneurs of UAE have marked openly that social media networking has fueled the growth of their businesses significantly. From the studies, it tends to be seen that female web clients in the UAE procure a subsequent position positioning among the world for online entertainment enrollments. Most social media memberships are from females who found it the best way to share their social life and attract their clients and increase their chances for income. The memberships have pushed for the spearheading of women who focus on entrepreneurship.

4.3 Importance of social media in Women's Entrepreneurship

As women can gain more power and influence in the business world, they started using different social networks to get fresh ideas and innovation. With that, it will help them to create good content in their social account network and will attract people to check their account and start buying and interacting with the owner's account. Moreover, it will help women businesses to create new products, services, and businesses. Social media can help women break through the glass ceiling. It levels the playing field since women can network with anyone they want.

Moreover, social media platforms can create effective networks for women in business and help solve such problems as marketing and advertising and reserve the renting costs for an existing shop. Women faced many complications & challenges on their way to professional self-realization and development of business. In this case, social media played a vital role by eliminating many limitations caused by social and gender inequality. UAE Women started using Instagram and Facebook to promote their interests and thoughts as the first stage to

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organizing a favorable business environment (Vitenu-Sackey, 2020). The presence of an opportunity to use the benefits of the innovative technologies turned into a starting point for their development and professional self-realization. The promotion of goods and services through the use of certain social media destroyed stereotypes and prejudices related to the inability of women to do business on equal terms with men. Specific social networks are viral in the UAE. The information reflected in social media turned into a condition for eliminating stereotypes about women. This issue has been relevant for a long time and is always relevant. That is why it is necessary to pay attention to the issue of stereotypical perception. Specific internet platforms become the resources for exchanging experience, knowledge, and skills between entrepreneurs worldwide. UAE women obtained moral support by expressing enough courage to realize their business ideas by turning them into companies with multimillion-dollar profits. The absence of stereotypes and social condemnations was the main driving force toward achieving the goals. The UAE women used different kinds of social media to talk about their problems by obtaining the information and recommendations needed to overcome the issues obstructing business development (Table 3).

Table 3: Most used Social Media Platforms in UAE 2022

Top Social Network Platforms in UAE	Percentage	Active Users (in a million)
Facebook	81.60%	8.11 million
Instagram	77.50%	7.70 million
Tik Tok	59.70%	5.93 million
Twitter	51.70%	5.14 million
LinkedIn	44.90%	4.46 million
Pinterest	29.40%	2.92 million
Skype	22.90%	2.28 million

(Source: https://www.theglobalstatistics.com/uae-social-media-statistics/)

4.4 The Socio-Economic progress

The Arab women turned into independent and free entrepreneurs making every effort to promote their businesses and areas of activity through the use of digital marketing tools. In this case, the introduction of independent and free entrepreneurs becomes possible through active profiles on Facebook and Instagram. The modern market for goods and services has changed a lot lately by leading to the advantage of online sales over offline stores. The same

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approach became a foundation for creating new sales strategies and brand development. The socio-economic progress managed to eliminate the limitations caused by the dominance of gender inequality and strict laws for women. the issue related to the low employment rate of women has lost its relevance due to an increase in the level of self-employed entrepreneurs engaged in the development of their companies and brands.

4.5 Most preferable social media among UAE women

Several articles have mentioned a decrease in using some social tools, such as Facebook and Twitter, among Emirati ladies. There are many reasons behind that, such as Facebook performing meaningful use, mainly for posting pictures and convoluted. At the same time, Twitter is mostly for genuine and political discussion and is not that eye-catching and valuable for marketing.

Despite what might be expected, Instagram claims to be the more significant part of them as the essential online media network and the most helpful for business and marketing. On Instagram, the number of supporters can mirror the nature of the item and the accomplishment of the business, however. I cannot forget that related to the tradition in UAE; women feel more comfortable using Instagram to market their goods without showing themselves. It is an online store that saved them from paying lots of money for rent and let them continue selling. At the same time, the pandemic of Coronavirus struck in 2020. They learned how to utilize themselves and operate.

The investigation has discovered that Instagram was productively utilized by UAE women, particularly for locally situated organizations. Various advertising systems were made to guarantee brand mindfulness and client commitment. The most featured element of Instagram is the way that it is in-costly and easy to use, just as giving high openness to the items.

If we talk about utilizing the internet in general, it is used mainly for communication, studying, work, searching, and engagement with people from a different world. In the UAE, women entrepreneurs demonstrate that using the internet as an enhancement of cooperation and also support is conceivable through expanding interaction and networking (Erogul, M. S. (2011). Numerous researchers characterized networks as "the arrangement of linkages among people and contacts as the arrangement of people associated by these linkages" (Mitchell, 1969, p. 4). They are associating it with Entrepreneurial organizations; it has been characterized as outright associations where a business visionary takes an interest that gives a significant asset to his or her exercises (Dodd & Patra, 2002). The informal community viewpoint holds that conduct relies upon the nature and construction of an individual's social connections (Burt, 1982).

Among media stages such as Facebook, Twitter, and YouTube, Instagram was seen as the best mechanical assembly instrument for arriving at clients and showcasing a business (Miles, J. 2013). Instagram was planned for cell phones, and since cell phones help to relate individuals to online media progressing, it simplifies it for a business to arrive at its clients any place they are, which makes sense why more than 50 % of organizations use Instagram to showcase their items and administrations Miles, J.: Instagram Power: Build Your Brand and Reach More Customers with the Power of Pictures. McGraw-Hill, New York (2013). Through research, it tracked down that women in the gulf area – as all gulf countries share the same values and traditions, and behaviors – women entrepreneurs, specifically, have found better approaches to take advantage of Instagram accounts in order to initiate and manage small online businesses. This social App enabled them to make new positions, pay, and build image names. Also, it reaches interested users and customers without needing

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direct contact. For now, no examination has yet recognized the elements influencing the outcome of Instagram-based independent companies (Alkhowaiter, W. 2016)
To several scholars, the Reputation of Instagram for making online stores sell their items regularly handcrafted provides many advantages for these women. This is good for some countries, particularly given the limitations entering the workforce, such as Saudi women as a result of some cultural characteristics of Saudi society, but for women in UAE, as they are getting full support from their government and family is a significant advantage and chance. The utilization of Instagram represents an independent company that grants the owner the to remain indeed near family to keep up with the integrity of the household. One more advantage is the low or irrelevant expense of beginning a business along these lines, as making and keeping an Instagram-based independent venture is legend reasonable than dealing with an expert site (AlGhamdi, E., Reilly, D 2013).

4.6 Why Instagram?
Many researchers the utilization of Instagram – Insta - as a powerful promoting instrument by Emirati businesswomen. It observed seven primary elements creating Insta as an effective marketing instrument. Both principles' purposes behind women's businesses utilizing Insta are that it is easy to use and permits them to contact many people or business organizations. Furthermore, given that Insta is free to use, that its utilization is not confined by guidelines, that clients are locked in through remarks and prefers, lastly, that the method involved with sharing lots of pictures, videos & experiences of the owner and clients makes an Instagram account into an intriguing sort of virtual index.
An additional new investigation (AlGhamdi, E., Reilly, D 2013) found that Women in UAE utilized Insta to sell their items since it can deliver them admittance to the marketplace while assisting with keeping up with their security, privacy, and well-being. It likewise empowers them to remain genuinely near their families while maintaining their work and duties while permitting them to keep up with the uprightness of their families. At last, there are no problems with registration costs, as the app is for nothing. A few of them had accepted that Instagram had enabled them to collaborate with their adherents, all of whom they consider to be likely clients. Collaborating with them through the remark and labeling highlights has assisted them with distinguishing clients' requirements and attempting to satisfy them. This load of reasons could add to the utilization of Instagram as a selling stage, therefore, will help with setting out more occupation-open entryways for women in UAE, as having a business is pretty much as massive as guidance for money-related security.

5. Conclusion
UAE women demonstrate outstanding potential for entrepreneurship. The conducted study represents one more confirmation of this aspect. They try to obtain the skills needed for using social media for specific purposes, especially by preferring and using Instagram. In this case, the government tries to support their desire to achieve self-realization. These processes have a positive impact on the economic situation in the country by leading to the use of innovative technologies for the benefit of society, so women can quickly create an account and use it to brand and sell their products. By using Instagram, UAE women do not feel any kinds of limitations and restrictions related to gender inequality and the absence of social rights in the UAE. UAE women managed to run successful and profitable businesses through the involvement of like-minded people worldwide. They obtained the necessary support to get rid of the negative influence of stereotypes and the desire of men to limit the opportunities of

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women. The dominance of social and gender equality is a requirement for stable economic development in any country. The small and medium enterprises led by the UAE women positively impact economics and employment by frustrating the emergence of a loyal attitude towards women when applying for a job. In this case, gender discrimination was terminated to be a reason for unemployment among women. Social media turned into an endless source of digital tools for the creation and promotion of marketing strategies as the primary way to attract the attention of potential clients and investors. The positive image of women entrepreneurs became a prerequisite for increasing investment in their projects and companies. This situation changed the way UAE women perceive having limited rights and freedoms. The need to raise children and run the household cannot deny other activities by limiting women's interests. The online businesses functioning through social media provide UAE women with the necessary resources to perform daily duties on an equal basis with the business cases. This approach is a starting point for eliminating any challenges influenced by culture or society, as every decade, we have a new social instrument.

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Impact of Mentoring Function on Entrepreneurial Self-efficacy and Effectual Logic of Grass-root Innovators: An Exploratory Study

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INTRODUCTION

Innovation is defined as the most significant trait of entrepreneurship. According to (Peter F. Drucker, 1998) innovation is "a change that produces a new element of performance." The invention of products comes in two forms. Technological failure or the introduction of a novel, the inventive product is an example of pioneering or revolutionary innovation. Modifications to the existing items are known as incremental innovations. Businesses need to be more innovative, from pricing to manufacturing. Tom Monaghan's decision to launch Domino's Pizza's home delivery service in the late 1960s and Jeff Bezos' decision to launch Amazon.com, which sells books online, were both made in the 1990s.They both serve as illustrations of fresh approaches to revamping the distribution industry. Entrepreneurs in developing countries innovate products by remaking and replicating things. Human ambitions and difficulties in life can easily lead to inadvertent inventions. The term "grassroots" refers to individuals who regularly implement innovative solutions to tackle local problems usually without receiving formal financial support.

The focus of grassroots innovation is on the innovators themselves (Bhaduri & Kumar, 2009). Products or innovative processes developed at the bottom of bottom-up solutions are known as grassroots innovations. They typically depend on necessity, difficulties, and challenges. Individual innovators are "people who take inventive efforts to build bottom-up answers, local needs" (Bhaduri & Kumar, 2010). Those with few resources, who can effectively think or act can make an effort to tackle local issues. To sum up, grass-roots innovation has major three objectives- a) generating bottom-up solutions for sustainable development b) Providing unique solutions to local situations, and c) ensuring that communities have control over the processes and outcomes.

Socio-psycho perspective of entrepreneurship research reviews entrepreneurial mindsets. This paradigm asserts that complexly determined entrepreneurial behaviors require research models to suggest significant processes that affect the entrepreneurial behavior of individuals. Self-efficacy is one such significant variable that entails a belief mechanism related to entrepreneurial behavior. This paper explores mentoring function as a significant antecedent of entrepreneurial self-efficacy. This paper also explores effectual logic as the possible outcome of entrepreneurial self-efficacy of grass root innovators. These terms have been well discussed in the subsequent section. The paper is divided into major three sections. The next section presents a detailed literature review, objectives of the study and conceptual framework. This is followed by research design, results and discussion. In the end, the conclusion, implications and future research directions are discussed.

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LITERATURE REVIEW

ENTREPRENEURIAL SELF-EFFICACY

Entrepreneurial self-efficacy, which is defined as one's confidence in one's ability to complete a task (Bird, 1988), has a big impact on how one develops entrepreneurial intention. According to (Drnovek et al., 2010), self-efficacy aids in promoting positive attitudes and reining in negative ones that are pertinent to business start-ups. In their study of entrepreneurial self-efficacy (ESE), (Chen et al., 1998) developed components for marketing, innovation, management, taking risks, and financial control.

Market entrepreneurial self-efficacy aids in establishing a position in the product market, doing market analysis, achieving sales targets, accomplishing profit goals, and aiding in business expansion. Entrepreneurial self-efficacy in innovation supports the creation of new businesses, new ventures, ideas, products, and services, as well as the analysis of new markets and geographical areas for the creation of new businesses and the development of innovative production, marketing, and management techniques. Managing time to define goals, setting and achieving goals and objectives, and defining organizational roles, duties, and rules are all made easier by management entrepreneurial self-efficacy. It also helps in reducing risk and uncertainty. Take calculated chances, make decisions in the face of risk and ambiguity, accept responsibility for thoughts and choices, and evaluate work under pressure and conflict. Financial mastery Performing financial analysis, creating financial systems and internal controls, and managing costs are all examples of entrepreneurial self-efficacy (Cumberland et al., 2015).

One of the most notable results was that risk-taking and invention seemed to be major cognitive qualities in entrepreneurial self-efficacy. According to (Krueger et al., 2000), those who have high levels of self-efficacy are more motivated to work hard to overcome challenges in their professional lives. (Neupert et al., 2004), who discovered that self-efficacy is a key element in one's ability to launch a firm. According to (Chandler et al., 1992), entrepreneurial success depends on skills like opportunity recognition and business venture leadership.

Social cognition theory provides an explanation for the theoretical basis of the determinants of entrepreneurial self-efficacy (Bandura, 1997). As a result of interactions with one's internal and external environment, social context, observation, social persuasion (BarNir et al., 2011), mastery experiences (Lee et al., 2016), vicarious learning from role models and mentors (Laviolette et al., 2012), work experience (Farashah, 2015), and assessment of one's own physiological state, as well as other factors, a person develops and nurtures self-efficacy beliefs (Newman et al. 2019). Some further important drivers of entrepreneurial self-efficacy are individual differences such as gender (Dempsey & Jennings, 2014), education and training (Kubberod & Pettersen, 2017), teaching methods (Abaho et al., 2015), risk-taking preferences (Zhao et al., 2005; Zhang & Cain, 2017), cognitive styles (Barbosa et al., 2007), family background (Tolentino et al., 2014), and personality traits like the need for achievement, locus of control (Luthans & Ibrayeva, 2007) and conscientiousness (Otto, Glaser, & Dalbert, 2009).

MENTORING

(Chelsea, 2018) discovered that there was a rise in self-efficacy and a sense of belonging, suggesting that mentoring may be a crucial element of success. (Hinney & Haas, 2003) found that students with higher levels of self-efficacy were able to manage better than students with lower levels of self-efficacy.

Students who may be more adept at managing their time may feel more capable of finishing projects or assignments in a college environment, resulting in a higher sense of self-efficacy. The self-efficacy of mentees is encouraged by mentoring that adheres to constructivist principles rather than transmitted ones, claims (Craig, 2018). (Richter et al., 2013); (Lejonberg & Tiplic, 2016) presented findings that showed reflection-based mentoring had no effect on mentees' self-efficacy as teachers. Mentoring helps people feel more capable. High

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self-efficacy people exhibit professional resiliency and have a strong sense of optimism about their capacity to change, succeed, and endure in the workplace (Jnah & Robinson, 2015).
Enhancing one's goals, efforts, actions, and decisions requires self-efficacy (Bandura, 2001). Self-assured people will behave appropriately and put forth great effort to overcome any obstacles that may come along (Newman et al., 2019). Community-level initiatives to address social issues have benefited from self-efficacy in the context of social entrepreneurship (Hockerts, 2017). These individuals are initially self-assured enough to consider their suitability for a job, but they take the initiative to do so. People who are confident in their abilities to organize, reinforce, and inspire some personal behaviors do so by taking the initiative, according to Bandura (1986).
Self-efficacy as an entrepreneur has become a crucial psychological concept in the field of entrepreneurship research (Miao et al., 2017). Self-efficacy, a cognitive notion, is a person's assurance in their capacity to do a task (Bandura, 1986). Entrepreneurial self-efficacy was described by (Chen et al., 1998) as a person's confidence in their capacity to carry out tasks and play roles that promote entrepreneurial outcomes. Such aptitude has a crucial role in determining whether people follow entrepreneurial jobs and exhibit entrepreneurial behaviors that allow them to launch new businesses (Asante & Affum-Osei, 2019; Kyazze et al., 2020).
According to (Cassar & Friedman, 2009), entrepreneurial self-efficacy is the assurance a person has in their capacity to carry out tasks specific to the field of entrepreneurship. According to studies, a variety of behaviors and ideas have been linked to entrepreneurial self-efficacy (Bandura, 2001). Entrepreneurial self-efficacy is correlated with entrepreneurial behavior, entrepreneurial orientation, new venture performance, entrepreneurial objectives, and new venture performance (Adebusuyi & Adebusuyi, 2020; Fuller et al., 2018; Hsu et al., 2019; Santos & Liguori, 2019; Miao et al., 2017; Frese & Fay, 2001). Entrepreneurial self-efficacy is connected with a rise in involvement in entrepreneurial education and training (Gielnik et al., 2017). A person's confidence in their ability to produce successful results is referred to as entrepreneurial self-efficacy (Piperopoulos & Dimov, 2015). The likelihood of independent social entrepreneurs completing their projects through the pre-launch phase is unquestionably higher. A person is more likely to begin a social organization than someone who lacks confidence in their capacity to do so.

EFFECTUAL LOGIC

The extent to which a person is confident in their capacity to carry out entrepreneurial duties is measured by their entrepreneurial self-efficacy (Bandura, 1997; Chen et al., 1998). Importantly, even without any prior experience, people can be very confident (Camerer & Lovallo, 1999; Townsend et al., 2010), and such (over)confidence in competence is frequently linked to entrepreneurial decisions (Hayward et al., 2006; Koellinger et al., 2007; Wu & Knott., 2006). These characteristics place effectual logic as a significant outcome of decision-making generally. Additionally, effectual logic promotes empirical reasoning and conveys the conviction that one can directly influence the environment (Busenitz & Barney, 1997; Wood & Bandura, 1989). Therefore, entrepreneurial self-efficacy is a plausible predictor to the extent that effectual logic functions by downplaying predictive information while also leveraging reactiveness, agency, and control (Sarasvathy & Dew, 2008). Effectuation, (Sarasvathy, 2001), is the process of matching goals with available resources while keeping losses reasonable and taking advantage of eventualities. It resonates with the entrepreneurial self-efficacy of grassroots innovators since they typically work in ambiguous environments and hope to foretell their future using self-efficacy. Researchers refer to this type of grassroots improvisational mindset as "jugaad," and it is common in various emerging economies like India (Krishnan, 2010; Rajdou et al., 2012). Effectual logic requires consideration of the available set of means, potential sets of effects, restrictions on such potential sets of effects, and selection criteria for the desired effect from the set of potential effects.

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When the future is highly unknown and the particular nature or qualities of the objectives are not known with any degree of certainty, effectual logic is especially useful. The theoretical justification connecting the opportunity frame to both entrepreneurial self-efficacy and effectuation is provided by these key properties of the framework (Gartner et al., 2008; Krueger & Dickson, 1994; Wiltbank et al., 2006). Therefore, the researcher has suggested that in this study, effectual logic be explored as a potential outcome of grassroots innovators' entrepreneurial self-efficacy.

OBJECTIVES OF THE STUDY

1. To understand the role of mentoring function on entrepreneurial self-efficacy of grassroots innovators.
2. To investigate how entrepreneurial self-efficacy affects effectual logic of grassroots innovators.

CONCEPTUAL FRAMEWORK

The proposed conceptual framework (Figure-1) establishes mentoring function as a driver/antecedent of entrepreneurial self efficacy and effectual logic as its possible consequent.

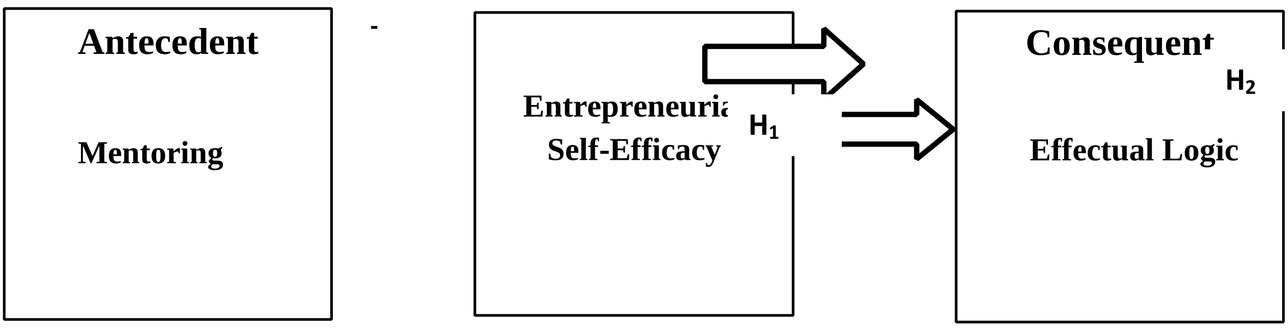

Figure 1: Conceptual Framework of the Study (self-constructed by authors)

RESEARCH DESIGN AND METHODOLOGY

The sample was made up of grassroots innovator/entrepreneur from India's northern area who were either being trained as entrepreneurs or had expressed interest in doing innovative work. As part of numerous entrepreneurial efforts, students who were being mentored and taught for entrepreneurial activities will also be potential grassroots innovators/ entrepreneurs. Numerous higher education institutions in India provide Bachelor of Vocation (B.Voc.) programs and other skill-building initiatives that train and advise students for entrepreneurship. These students are considered beginners. In entrepreneurship research, it is common practice to use students as potential grassroots innovators/entrepreneurs (Li & Dandan, 2019; Souitaris & Zerbinati, 2007; Souitaris et al. 2007; Wilson et al. 2007; O'Connor, 2013; Rauch & Hulsink, 2015; Siegel & Wright, 2015; Sánchez & Sahuquillo, 2018; Fiore et al. 2019). Therefore, in the present research also, students were included as potential grassroots innovators/ entrepreneurs for empirical analysis. The study used a sample of 114 participants. Validated and reliable instruments were used to examine the role of variables as per the proposed conceptual framework.

RESULTS

The researcher employed multiple regression analysis to assess the hypotheses generated in accordance with the study's objectives. Because this is a social science study and the variables being examined are behavioral, the researcher set a level of significance at 80%.

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Quantitative Data

Mentoring and Entrepreneurial Self-efficacy

H_{o1}: There is no significant relationship between mentoring and entrepreneurial self-efficacy.

H_{a1}: There is a significant relationship between mentoring and entrepreneurial self-efficacy

The model includes mentorship of potential entrepreneurs' accounts for 68% of the variation (adjusted R square of 0.68) towards potential entrepreneurs' entrepreneurial self-efficacy, which is both significant and positive (β= 0.21, p = 0.00) These findings demonstrate a beneficial relationship between entrepreneurial self-efficacy and mentoring of aspiring business owners. As a result, the null hypothesis is accepted, confirming that there is no connection between mentoring function and the entrepreneurial self-efficacy of grassroots innovators.

Table 1: Regression analysis results

Predictor	Unstandardized Coefficients		Standard Coefficients							
	B	**B (SE)**	**Beta (β)**	**T**	**P**	**R**	**R Square**	**R Square Adjusted**	**F**	**P**
Mentoring	0.81	0.21	0.41	3.79	0.00	0.82	0.68	0.66	38	0.59

Predictors: Mentoring
Dependent Variable: Entrepreneurial Self-efficacy.

Entrepreneurial Self-efficacy and Effectual logic

H_{o2}: There is no significant relationship between entrepreneurial self-efficacy and effectual logic.

H_{a2}: There is a significant relationship between entrepreneurial self-efficacy and effectual logic.

This model has an adjusted R square of 0.66 and a respectable F statistic value of 38. This suggests that there is a 66% difference in economic worth as a result of effectual logic. The value β= 0.39, p = 0.00, which also shows a significant positive link between the variables, is shown by the effectual logic. Thus, the null hypothesis is rejected and it is clear that there is a positive correlation between entrepreneurial self-efficacy and the effectual logic of future entrepreneurs.

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Table 2: Regression analysis results

Predictor	Unstandardized Coefficients		Standard Coefficients							
	B	B (SE)	Beta (β)	T	P	R	R Square	R Square Adjusted	F	P
Effectual Logic	1.57	0.40	0.39	3.90	0.00	0.83	0.68	0.66	38	0.59

Predictors: Effectual Logic
Dependent Variable: Entrepreneurial Self Efficacy

DISCUSSION

The quantitative data shows that there is no correlation between mentoring function and entrepreneurial self-efficacy. As researchers have suggested, mentoring naturally promotes the growth of Entrepreneurial Self-efficacy (Gravells, 2006; Nandram, 2003). This supports the function of mentoring in creating immediate benefits for potential grassroots/ entrepreneurs, as demonstrated by mentoring in large enterprises (Wanberg et al., 2003). However, mentoring hinders an entrepreneur's ability to directly develop job satisfaction and even weakens their desire to continue operating their organization. Although these results at first glance seem incongruous, an explanation could be offered. Our hypothesis is that mentoring helps business owners feel more confident about their ability to define their venture's mission and develop some managerial abilities. Therefore, when presented with a business endeavor that has a slim possibility of success and over which mentors have little or no influence. Entrepreneurs require self-efficacy in the highly competitive market to consistently think positively about starting a firm and gaining a competitive advantage.

Entrepreneurial self-efficacy has been found to be positively correlated with effectual logic, which suggests that entrepreneurs need to think effectively to determine the one best solution to an issue, and effectual thinking helps to control the lone best solution to a problem, and an entrepreneur's mentality also helps. (Kahneman & Lovallo, 1993) found that business owners frequently have an optimistic (and occasionally irrational) outlook on the future of their ventures. The researcher notes that these decision-makers frequently adopt an inside perspective that emphasizes the present situation and reflects their personal participation in it as opposed to an outside perspective that impartially contrasts the current situation with the outcomes of pertinent previous ones. For grassroots innovators/entrepreneurs, figuring out how to use effectual logic in venture creation is difficult. The application of effectual logic is important for innovation processes in the organization context, which is the focus of this paper's initial investigation. To separate and better characterize the issues, as well as to undertake trials into the systematic development and efficient deployment of enterprise entrepreneurs, more theoretical research is to be done (Thomas et al., 2012).

Researcher suggests that the successful application of effectual logic to the in-depth study of potential entrepreneurs provides compelling evidence that these ideas may also be used to comprehend business entrepreneurship. Interestingly, research on effectual logic reveals that these are talents that can be learnt and mastered rather than inherent traits of successful grassroots innovators/entrepreneurs. Intriguing indications regarding how grassroots entrepreneurs might be developed, educated, and then released into the enterprise to use effectuation and effective reasoning are also provided by this area of research. This enterprise entrepreneur growth process requires further study. Researcher thinks that detailed analysis of

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the developing attempts to use effectual logic in grassroots innovation contexts should be monitored, benchmarked, and evaluated. This research will examine how processes are modified, but it will also examine effective business development and nurturing strategies. Given that the majority of innovators view "innovation" as a crucial component of future business success.

LIMITATIONS

The survey method has several drawbacks because it could be unable to explain specific behavioral problems. Additionally, it makes it harder to comprehend a phenomenon's context. The current investigation was carried out in the Indian context. The sample size and changes in the geographic distribution could affect these results. The length of the questionnaire made it difficult for the researcher to collect objective and truthful information from the respondents. The researcher is having difficulty collecting offline data due to COVID-19. To overcome this, researchers create a Google form and fill it out online mode. This study's main flaw was that mentoring was not evaluated more thoroughly to establish if it was formal or informal. The quality and length of formal mentoring relationships should be included in future studies

CONCLUSION AND FUTURE RESEARCH

Mentoring qualities are used by potential business owners and have a big impact on their sense of self-efficacy. Additionally, effectual logic has a strong impact on entrepreneurial self-efficacy; quantitative evidence from both effectual logic and mentoring factors point to this relationship. The interaction between mentorship and entrepreneurial self-efficacy has been found to depend on a variety of different factors. These variables include the kind of class, its size, the mentor, the length of the mentoring session, and the amount of freedom the mentors grant the mentees. Therefore, the effects of these factors can be researched in upcoming studies. Other than this antecedent (mentoring), there will be more future studies that can examine. The geographical scope of this study was restricted to Agra, while it may have included other study locations.

IMPLICATIONS

Implications for Practical

This study deepens our understanding of potential Grassroots Innovators, a grassroots innovation with an emphasis on venture creation.

By putting out a conceptual framework, this study contributes to the literature on Grassroots innovation and offers a thorough knowledge of the forces that shape Grassroots innovation in a particular society as well as the benefits that come from its position in both the community and the economy.

Implications for Research

The key constructs introduced at the outcome side of the proposed conceptual framework, viz effectual logic has not been empirically validated by researchers. This construct has been discussed in conceptual articles and has profoundly been connected with grass-roots innovators.

Government agencies, NGOs, and local development teams could use Grassroots innovation. The conceptual framework will be a road map for the socio-economic development of the rural and suburban neighborhoods. Grassroots innovation can aim to establish a worldwide presence.

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Sustaining in the Heuristic by Migrating Data Warehouse to Azure Cloud

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Abstract

Purpose: This article presents a detailed analysis of the Merits and Demerits of Migrating the Data Warehouse of any organization in the Cloud, specifically the Azure Cloud Platform. A Data Warehouse acts as a Single Point of Truth for all the decisions an enterprise makes.

Research methodology: Data is the oil to a successful organization. Having competition in any business makes it even more critical for an organization to set up a complete Data Warehouse where they can reap the benefits of the Data captured in their organization to make informed Business Decisions.

Findings: Setting up a Data Warehouse on their Premises or the Cloud is one of the most critical decisions made by the Chief Technology Officer. Each option has its own Merits and Demerits. Hence, this research intends to provide the organization with a detailed comparison and explain the benefits of setting up a Data Warehouse in the Cloud over on-premises, making it easy for them to make this critical decision.

Implications: The comparison will be made based on five parameters: Availability, Scalability, Pricing, Performance, and User Friendliness. In the end, a Tabulated Comparison table will be presented, suggesting the option to choose based on the Business Requirement.

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Equal Rights=Equal Opportunities?
The Effect of Gender Inequality on Entrepreneurial Choice

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Abstract

A world where women are empowered with equal rights and access to equal opportunities: this is the aim of the fifth Sustainable Development Goal. One of the main forces behind women's empowerment in this effort is entrepreneurship, which not only improves the socio-economic standing of women in society but also reduces gender inequities already in place. On the other hand, reducing gender disparity empowers women, motivating them and boosting their morale, becoming a major impetus behind why women choose to work for themselves. Using a dataset of 159 nations spanning over a decade and the male-to-female sex ratio as an instrument, this study investigates the endogeneity between gender inequality and women's entrepreneurial choice, trying to understand if the former effects the latter. We discuss possible implications for not only entrepreneurship research and gender studies but also as the harbinger of a better, more sustainable and equitable world.

Key words: Gender Inequality, Entrepreneurial Choice, Endogeneity, Instrumental Variable

1. Objectives of the Study

The relationship between gender inequality/equality and entrepreneurial choice has been acknowledged in existing literature but with conflicting views; whether the latter leads to the former or the other way around is debated. This study aims at separating these contrasting findings by resolving the endogeneity and presenting a clearer view, discussing possible implications for entrepreneurship research, gender studies and how it can herald a more gender equitable society and sustainable world. For this, we use a dataset of 159 countries from 2010 to 2019, spread over a decade and adopt an instrumental variable analysis.

2. Literature & Research Gap

The United Nations adopted the 2030 Sustainable Development Agenda with one of its key global priorities as the removal of gender stereotypes and elimination of gender inequality. Sustainable Development Goal No.5 (SDG5) aims to achieve equality among genders and empower women and girls around the world. In addition to being a fundamental human right, equality is also one of the essential building blocks of a world that is stable, prosperous, and sustainable.

Many scholars have suggested a strategy focused on entrepreneurship associated inclusiveness and gender equality as a necessity to address some of the major societal issues

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in both developed and developing countries (including exclusion, poverty, and inequality) (Scott et al., 2012; Pathak and Muralidharan, 2018; Patel et al., 2018). Entrepreneurs propel the economic growth and revitalization of a nation (Tiwari Tiwari, 2007). While entrepreneurial contributions to society at large are substantial, the gender of an entrepreneur remains inconsequential; both male and female entrepreneurs play a valuable role in generating societal transition and change which can lead to the alleviation of poverty (Hechavarria et al., 2019; Rosca et al., 2020).

The number of women and men who are self-employed, either through freelancing activities or new ventures varies significantly from country to country. Also, when compared to men, women have been found to be typically driven by financial necessity rather than commercial opportunities or business motivations (GEM, 2014; Brush et al. 2009). The state of female entrepreneurship around the world is a reflection of gender disparities, which are often negligible for men (Marlow & Patton, 2005). Thus, male counterparts with similar ideas and capabilities end up with unfair and unequal access to opportunities, funds and resources (Marlow & Patton, 2005).

Business experts from various fields have concurred that fostering female entrepreneurship and boosting the number of female-led businesses are crucial to achieving a country's sustainable development (UNDP, 2019; Miotto et al., 2019). Across the world, women entrepreneurs are increasingly becoming involved in driving socio-economic progress and ensuring its long term sustainability in developed as well as developing countries. However, countries suffering from a high degree of inequality seldom take into account the differences in the preferences and priorities of men and women (UN, 2015).

While entrepreneurship elevates the socio-economic status of women (Sathiabama K,2010) reducing the gender gap, bridging the gender divide can also lead to entrepreneurship development . Alleviation of gender inequality is directly linked to female empowerment. Increase in the gender composition of the workforce and the labour force participation rate for women makes them more empowered, thus inequality becoming consequently lesser.

The reallocation of power has also been considered as a signal of equality because it makes it possible for women to gain control over tangible physical resources as well as positions of power (Brush, C.G., 2006). Equal opportunities spread awareness, lead to capacity building, and higher involvement while taking decisions (M.A. Awwal Sarker, 2006). This in turn can lead to more women making the choice to be an entrepreneur and boosting their status in the society. With women becoming conscious of their role, their rights and possible opportunities (Usha C., Raghavendra B. N., 2013), they are stepping into the industry and taking the place of men.

Therefore, while women are being regarded as a symbol of the empowered and contributing towards alleviating gender inequality, promotion of gender equality has itself become a major sine-quo-non for the likelihood of women starting a business and being self-employed. With these conflicting views present in existing literature, the relationship between gender inequality/equality and entrepreneurial choice is acknowledged; but whether the latter leads to the former or the other way around is debated. This study explores this simultaneity in the relationship between the two, and contributes by being a first of its kind study which tries to understand this endogeneity and resolve the conflicting views present in existing literature.

3. Data and Methodology

The empirical analysis is done using the GII or Gender Inequality Index and Self Employed Data from United Nations Development Programme (UNDP) and the World Bank, respectively, for 159 countries spread over a decade from 2010 to 2019. It analyses the

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influence of gender inequality on entrepreneurial choice/the choice to be self-employed with sex ratio as the instrumental variable.

The 159 countries included in this study have been classified as Very High HDI (57), High HDI (37), Medium HDI (29) and Low HDI (25) for further analysis based on the "Inequality Adjusted Human Development Index". There are 12 countries which do not fall into any of the above categories, and have been considered separately. These countries seem to have Human Development values lower than the Low HDI category, and hence have not been classified by the UNDP.

The overall descriptive statistics for 159 countries over a decade from 2009 to 2019 are shown in Table 1. Out of the current updated list of 195 countries in the world, the sample has been restricted to 159 countries, excluding 36 countries due to unavailability of data and missing values of different variables from 2009 to 2019. The time period of 2009 to 2019 was also selected purely based on the availability of data; data before 2009 and beyond 2019 was meagre and insufficient for analysis. In order to facilitate analysis, some data points were imputed based on values estimated through extrapolation wherever found feasible and within the limits of statistical ethics.

Table 1. Descriptive Statistics

Variable	**Min**	**Max**	**Mean**	**Median**	**Mode**	**Standard Deviation**
GII	0.03	0.82	0.37	0.40	0.54	0.19
EC	0.31	98.21	29.06	24.15	8.91	22.37
Instrument:						
SR	1.01	1.16	1.05	1.05	1.05	0.02
Control Variables:						
DFPM	6.00	92.58	48.16	34.55	34.55	19.29
AOFI	0.79	100.00	49.23	41.26	41.26	28.55
EDBS	30.03	87.17	62.06	62.02	61.87	13.23
CBSP	0.10	735.10	27.51	11.40	0.70	47.96

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TRSB	0.50	690.00	25.66	15.75	6.00	39.62
WBLS	26.30	100.00	73.60	76.30	97.50	18.44
GNIC	610.0 0	132440. 00	19335 .05	12730.0 0	19084 .57	19666.74

Note: N=159 countries (2009-2019); estimation results are after excluding 36 countries due to missing data. Only overall descriptive statistics have been included here.

The main objective is to study the effect of gender inequality on entrepreneurial choice and eliminate the simultaneity observed in existing literature using an instrumental variable approach to explain the endogeneity. The estimation is done using two-stage-least-squares (2SLS) with the help of STATA. For the analysis, we estimated the first stage without the instrument and the second stage including the instrumental variable.

Sex Ratio (SR) has been used as the instrumental variable. It has been found that high sex ratios in a country can encourage entrepreneurship (Wei & Zhang, 2011). This variable is exogenous in nature and has been used to instrument endogenous relationships in previous studies (Angrist J., 2002; Edlund et al., 2008; Chiapa et al., 2012; Cameron et al., 2016, 2019; Trako I., 2018). Its validity as an instrument has been tested (Huber M., 2015) and found to be statistically relevant as it is correlated to the endogenous explanatory variable. Sex ratio was found to be a strong instrument.

4. Results

The regression results are presented in Table 2. An overall significant effect of gender inequality on entrepreneurial choice is clearly observed; but a stronger positive effect is found with the instrument (β = 102.506). The substantial difference in the size of the effects might be explained by the fact that gender inequality is endogenous to entrepreneurial choice: without the instrument the 'true' effect is not properly observed.

Table 2. Regression Results

		(1)	(2)	(3)	(4)	(5)
VARIABLES	Overall	NA	Low	Medium	High	Very High
GII	102.506***	71.247***	-1,109.320	672.255	-20.467	-72.295**
	(22.649)	(20.819)	(704.200)	(700.080)	(17.097)	(29.278)
DFPM	-0.114***	-0.157***	-1.031	-0.053	0.023	0.140***
	(0.0403)	(0.056)	(0.655)	(0.226)	(0.043)	(0.029)

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AOFI	0.0202	0.083*	-0.129	0.054	-0.047	-0.109***
	(0.023)	(0.047)	(0.181)	(0.117)	(0.035)	(0.033)
EDBS	0.0331	0.605*	-2.477	0.692	-0.271***	-0.256**
	(0.153)	(0.330)	(1.830)	(1.101)	(0.091)	(0.127)
CBSP	0.0458***	0.275***	0.078	0.015	0.012	0.090
	(0.0067)	(0.079)	(0.054)	(0.025)	(0.016)	(0.066)
TRSB	0.0152**	0.009	0.077	-0.009	-0.005	-0.034
	(0.0073)	(0.090)	(0.141)	(0.078)	(0.008)	(0.030)
WBLS C	0.285***	0.304**	-1.075	1.096	0.150***	-0.120
	(0.0577)	(0.141)	(0.880)	(1.170)	(0.057)	(0.078)
GNIC C	-0.0001	-0.001***	-0.004	0.002	-0.001***	-0.000***
	(0.000)	(0.000)	(0.005)	(0.004)	(0.000)	(0.000)
Constant	-26.419	-45.048	977.998*	-420.163	51.815***	64.615***
	(21.2318)	(30.657)	(592.425)	(508.367)	(11.591)	(23.754)
Observations	1590	120	250	290	370	570
Countries	159	12	25	29	37	57
R Square						
Within	0.0305	0.0034	0.0008	0.0389	0.0370	0.0000

Between	0.6976	0.9471	0.0109	0.3418	0.1341	0.1860
Overall	0.6363	0.7890	0.0084	0.2723	0.1155	0.1292

"Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1"

5. Findings of the Study

Women continue to represent a meagre minority in entrepreneurship, and surprisingly, this is true even in nations with relatively low gender inequality. This, despite the increase in opportunities and support for self-employment and career choices in entrepreneurship for women (Tonoyan, Strohmeyer, & Jennings, 2019). Women entrepreneurship and its success also varies circumstantially across nations, as countries themselves differ based on their particular history, culture, customs, and gender conventions (Jennings and Brush 2013). The socio-economic environment that women entrepreneurs function in should thus be taken into consideration. In order to eliminate inequalities across all sectors of women's lives and make them truly empowered, and not in the economic sense alone, policymakers and organisations working towards the development of women should strive to implement interventions that involve a detailed awareness of the environment in work. This is true for developed as well as developing countries.

The sample size in this study is restricted to 159 countries by data availability and the choice of statistical analysis. Similar tests can be conducted with other data sets for understanding this endogenous relationship better.

6. Implications

The success of self-employment and women-owned ventures lags behind that of their male counterparts if measured singularly on the basis of economic standards alone. Although many nations have implemented governmental reforms to tackle this, the gender based pre-dominant inequality in these countries still reduce women to lower positions in society (Kantor 2003). Even though entrepreneurship may assist women in progressing towards gender parity, in order to maintain these advantages, constrictive systems and procedures must be changed to provide women entrepreneurs more control over the revenue they create through their businesses (Yousafzai et al. 2019). Therefore, if socioeconomic results are to be sustainable in the long run and gender equality be established, the entrepreneurial capacity of women must also be built.

Also, the very definition of "entrepreneurship" and entrepreneurial success has to be redefined, looking beyond the economic benefits and at the many noneconomic contributions which women in the business make (Dean et al. 2019). A purely economic purview undermines the contributions that women entrepreneurs make, presenting an under whelming picture and making them seem incapable and under performers, which is far from the truth (Du Rietz and Henrekson 2000).

A new approach and understanding of female entrepreneurship is required in order to properly comprehend how it may contribute to women's socioeconomic growth and gender equality. Future frameworks need to discontinue measuring female entrepreneurs and their success against the standard of their male counterparts. Instead, a fresh perspective should be adopted wherein it is acknowledged that, when given equal chances and resources as men, women can achieve distinct but no less significant entrepreneurial outcomes and contribute significantly to the society at large.

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The Influential Role of Positive Psychological Behaviors in Feat of Women Entrepreneurs of Tier Two Cities

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ABSTRACT

Entrepreneurship is the process of seeking validation over an ideation towards market demand. Post-pandemic the participation of entrepreneurs has been from every corner of the world. Women entrepreneurs are not far in the journey as they have been making substantial contributions to the global economy and society. Psychological capital has attracted a surge of interest in entrepreneurial literature, which considers that this capital is an individual resource, needed by entrepreneurs to run their businesses and ensure business success (Envick, 2005; Luthans et al., 2007b; Hizam- Hanafiah et al., 2017). This study proposes to address the research gap while exploring the role of positive psychological behaviors (Psycap) in women entrepreneurial success despite the issues that female entrepreneurs face in the specific context to tier II cities and the issues pertaining to it like cultural values, unavailability of funds, and lack of infrastructure, skill development and societal support. The present study will be analytical and endorse the quantitative approach of research methodology. The proposed study will look out for the influence of positive psychological behaviors (Self-efficacy, hope, optimism, resilience) in women entrepreneurial success despite the challenges they face at start-up as well as operating stages like non-availability of finance, restricted mobility freedom and having to perform dual role one at home and other at work women entrepreneurs face in the tier II city. The study will foray into and conclude with the alternatives and key identification to understand which of the positive psychological behaviors.

Keywords: Positive Psychological Behaviors, Psycap, Self-Efficacy, Hope, Optimism, Resilience, Women Entrepreneurial Success, Economic Growth, Women Entrepreneurial Success, Rural Development, Skill Development

Introduction

Entrepreneurship is a critical journey in the holistic upliftment of the society. Entrepreneurship is the process of seeking validation over an ideation. It promotes critical innovations required to exploit new opportunities, promote productivity and create employment along with addressing some of the extreme challenges of society like United Nations Sustainable Development Goals (SDGs) or the economic tremor created by the COVID-19 pandemic. Post-pandemic the participation of entrepreneurs has been from every corner of the world. Women entrepreneurs are not far in the journey as they have been

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making substantial contributions to the global economy and society. According to a GEM survey, an estimated 274 million women are globally involved in business start-ups besides 139 million owners or managers of reputable businesses and 144 million women investors globally (GEM, 2020). The worth of women entrepreneurship is accepted globally however it is less focused in developing countries and women being considered to be primary care often lack the confidence to start their own business. In India, the increasing presence and participation of women entrepreneurs has influenced the socio-economic demography of the country significantly. 20.37% of the women in India are MSME owners which account for 23.3 % of the labor force. However, these numbers illustrate only a part of the story. Women entrepreneurs are still a minority and the impediments faced by them are enormous and unique, different from their male counterparts but in those fewer statistics of 13.7% (as per Forbes data) also, women have been able to manage the journey successfully.

Theoretical Underpinning

Despite the challenges or the ground realities like women without an education, without support, without adequate access to finance and networking, women entrepreneurs are generally confident and resourceful and that they enjoy the challenge of entrepreneurial activity. The core purpose of this paper is to investigate the role of positive psychological behaviors (self-efficacy, hope, optimism and resilience) in women's entrepreneurial success in the Indian context. Ehegie & Umoren (2003) concludes that success for female entrepreneurs relies on a high self-concept regarding their role in business, commitment to business and reduction of a conflict between home responsibilities and business. Since inception, positive psychology has been explored in the varied areas of happiness, optimism, self-esteem, well-being and motivation. The presence of positive psychology reflects the hope, resilience, mindfulness, and positive thinking of the leader. Specifically, there is a focus on three areas of positive experiences: the past (well-being and satisfaction) , the present (happiness and flow) and the future (hope and optimism). These fields of research formed the basis for positive interventions, to increase happiness and well-being. Psychological capital has attracted a surge of interest in entrepreneurial literature, which considers that this capital is an individual resource, needed by entrepreneurs to run their businesses and ensure business success (Envick, 2005; Luthans et al., 2007b; Hizam- Hanafiah et al., 2017). Baluku et al. (2016) have found that psychological capital influences behavior and entrepreneurial success. Envick (2005) even claims that those responsible for managing the business must demonstrate a high level of psychological capital to ensure its success. For example, Chen et al. (1998) found that increasing entrepreneurial self-efficacy had a positive effect on entrepreneurial intentions.

Furthermore, Zhao et al. (2005) provided evidence that entrepreneurial self-efficacy mediates the relationship between gender and entrepreneurial intentions. Moreover, entrepreneurs who show high levels of hope are more positive about successfully achieving their objectives, and the ways to reach them (Baluku et al., 2016) and are also more likely to find different ways to cope with pressures and challenges. Additionally, studies also consider that optimism is related to the launching of a business, to the results obtained and to the entrepreneur's persistence. Highly optimistic entrepreneurs face the obstacles and challenges that arise when creating a new business adventure with a better mindset (Hmieleski and Baron, 2009; Ozaralli and Rivenburgh, 2016).

Many scholars have recently explored how women entrepreneurs manage multiple identities (mother, wife, daughter, sister) and navigate through often conflicting demands and expectations from their different social groups (Chasserio et al., 2014). According to this definition, women-owned firms appear to be less successful (Anna et al., 2000; Boden and Nucci, 2000; Fairlie and Robb, 2009; Henry et al., 2016). However, women seem to use less

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normative and subjective criteria for evaluating their professional success (Buttner and Moore, 1997; Gallos 1989; Powell and Mainiero, 1992). Dalborg (2012) concludes that the ascent to growth platforms (business development levels) represents "success" for women entrepreneurs; those platforms are survival, stability, job creation, recognition and personal development. There is growing acceptance that success is a construct (Weber, 2014) in which perception of the entrepreneur's success – which depends on the owner's motivation (intrinsic and extrinsic) and targets – enters into play. Intrinsic motivation is related to the entrepreneur's satisfaction, and extrinsic motivation is related to the business venture's economic, financial and operational profits.

Research Methodology

This study proposes to address the research gap while exploring the role of positive psychological behaviors (Psycap) in women entrepreneurial success despite the issues that female entrepreneurs face in the specific context to tier II cities and the issues pertaining to it like cultural values, unavailability of funds, and lack of infrastructure, skill development and societal support. The present study will be analytical and endorse the quantitative approach of research methodology.

Author will supposedly collect the data on primary as well as secondary level. The study applied is to be a non-random stratified sampling method (Gibbs, 2008) with a purposive selection of interviewees (Creswell, 2007) which will be an in-depth interview to analyze the issues that prevail. The population of the present study will be extended to multi-dimensional entrepreneurs of the TIER II city of India.

A sample size of 25 significant women entrepreneurs of the tier-II cities is expected to probe pertaining to the challenges and issues they faced during their journey. This will include first-generation businesswomen who are doing their business at medium as well as large scale. For the analysis of the data, the author proposes to do thematic analysis of the data and will try to analyze the issues and motivating factors for the growth of their business.

Significance of the Study

Tier II City are generally considered to be a male-dominated society and women assumed to be economically as well as socially dependent on male members. The absolute dependence seems to be diluted among the high and middle-class women as they become more aware of personal needs and demand greater equality. Women entrepreneurs face lots of problems at start-up as well as operating stages because of conservative society, finance, family conflicts, lack of education, technological knowledge, and marketing problems but still they try to do something. Along with technological revolution, mental revolution of society is needed to change the attitude of society and provide women with democratic and entrepreneurial platform of income generation, to uplift their social status, work against existing gender biases & contribution in the betterment of society. The proposed study will look out for the influence of positive psychological behaviors (Self-efficacy, hope, optimism, resilience) in women entrepreneurial success despite the challenges they face at start-up as well as operating stages like non-availability of finance, restricted mobility freedom and having to perform dual role one at home and other at work women entrepreneurs face in the tier II city. With vocational study, women can get economically empowered even when they do not have any proper job. Positive psychological behaviors (Self-efficacy, hope, optimism, resilience) being the state-like factors, on understanding which of the factors is critical in women's entrepreneurial success it can be incorporated in entrepreneurial education which can be effective for aspiring women entrepreneurs.

Directed Conclusion

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Women have great potential in nurturing the society with their proficient business skill as well and the budding entrepreneurs should not only be limited to household activities and small/cottage industries but be involved in more large-scale business ventures as well. The study prospects the need for better understanding of the cruciality of positive psychological behavior (Self-efficacy, hope, optimism, resilience) and equivalent mindset lens for female business owners critical for their success. Economic growth and development depend upon utilizing the workforce despite the gender discrimination which significantly is to be analyzed in this study. India is still on the verge of creating room for women entrepreneurship in the urban and metro cities which is why the road has a long way to go for tier II and rural setups. Despite its recent economic advances, India's gender balance for Female entrepreneurship is very niche and in remote locales it needs more motivation economically both by local communities and through governmental initiatives. The study will foray into and conclude with the alternatives and key identification to understand which of the positive psychological behaviors (Self-efficacy, hope, optimism, resilience) are critical to the success of women entrepreneurs who are specific to the Tier II city and will also be considerate for other rural and non-urban setups.

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Community Engagement Initiatives by Pehli Asha Foundation: Mobilizing Youth for a Social Cause

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"*If we have done any work together with someone, then after the work is finished, it is important to encourage them and also to work together with them in the future. But sometimes things go wrong and we try to learn from those mistakes so that we do not repeat them."*

Nitesh Ray, Founder of Pehli Asha

Introduction

The initiative Pehli Aasha NGO was started on 16th July 2017 on the birthday of Mr. Nitesh Rai, the founder of this organization, who wanted to do something for society on his very special day.

The "Pehli Aasha NGO" was established with the motto of "Helping poor people to change their lives." As the name depicts, Pehli Aasha means to become the first hope of the people in need. Though many people joined the organization, at the time of the first task, almost all the members did n't turn up, Mr. Nitesh Ray was left alone for the task but he didn't lose hope and started helping people all alone. When people saw this, they gradually got involved in the work. However, people used to come only occasionally according to their interests. This institution started originally in the college where Mr. Nitesh Ray completed his studies. There has been a lot of contribution from the college, and the college and its students are still associated with the projects undertaken by the NGO. However, involvement is not always guaranteed. It used to happen that when the work was there, very few people would list and turn up. This led Mr. Ray to create a team including 8 of his classmates who joined hands with him in their commitment to NGO work. They started teaching the poor children in a nearby college park on a regular basis.

The Turning Point

The turning point of this NGO was when Mr. Shivam Kumar joined the NGO on 6th Nov 2018. He was a brilliant man having the same feeling and motive for social service. Many people joined and left, but the duo of Mr. Nitesh Ray and Mr. Shivam Kumar was always there to serve people. According to them, it was the work of God and gave them inner peace, happiness, and satisfaction in their lives.

Floods in Bihar & Assam

One of the tasks of the NGO was to help the victims of floods in Bihar and Assam. Mr. Nitesh Ray telephoned Mr. Shivam after watching the news at 8 p.m. on Television. They both made up their mind to help but they were totally lacking in funds and helping hands. However, they managed to collect a fund of Rs. 6,000 from the college students. The next step was to get people on board to visit the flood-affected areas. To their dismay, people were not ready to take the risk and travel to affected locations. The duo motivated another person Mr. Rishabh Kumar and Nitesh's younger brother Ritesh Ray to come along. The four people then left Delhi at their own expense to the Madhubani District of Bihar. They reached there at

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9 p.m. and had to spend their night at Sulab Shauchalya near the railway station as they didn't have money to spend on lodging. When they helped the people, they were very happy, relieved, and satisfied as helping people in need is the work of God. No one can express the feeling and satisfaction after giving a smile and relief on the faces of victims.

Planning for other Initiatives

Mr. Ray used to plan for activities based on the benefits it may accrue to the most needy section of society. Then he used to create a team; discuss his vision with the team and the team would start collecting funds for the event. He would appoint one in charge for the event so that all the work can be done under his/her supervision and finally start the event. A lot of events for distributing food and clothes to the needy in winter were organized. Mr. Ray had a knack for maintaining friendships and nurturing relationships with people even after the activities and projects were finished. This led to the enhancement of the network of Pehli Asha and people came up with many new ideas for community engagement initiatives.

Funding

When it started, the NGO did not worry about financial resources. The drive to help the downtrodden was big enough to be limited by financial constraints. It mostly collected money from their known people in the society as the founder believed that there is strength in unity and if one person needs 10 kg of rice then even if 20 people are there, each person will only need half a kg of rice and this will also help the needy person. Mr. Ray never thought about getting money in the future and did not focus his efforts in that direction. He only knew that if 10 people get help from some amount of money, then they will just collect that much money so that their help is just there.

> I can't predict the future, I don't think from where I will get money in the future. I only believe in helping out people in need. I try to collect only that much amount which can benefit at least 10 people in need.
>
> Mr. Nitesh Ray

In due course of time, many people got associated with the NGO and its efforts were recognized in society. Some businessmen also came forward with donations to help them as per their needs. Before organizing any event, Mr. Ray used to have a meeting with all the members to discuss the venue, other required objects, and their costs, and then finalize the budget. Even when the activities of the NGO grew manifold, the expenditure of Pehli Asha NGO was not very high as they only worked as per the requirements. On average, in Nov 2022, the monthly expense of organizing an event was approximately 20 thousand and the monthly budget of the organization was approximately 2 lakhs.

Projects with Delhi Colleges

Project Pragati

Project Pragati was the first project of Pehli Aasha which started on July 24, 2017, in a park behind Sri Aurobindo College with the motive to educate poor and street children. Under this project, the NGO helped 50 poor children get admission to nearby schools. Books and stationery items were also distributed to underprivileged children. Mr. Nitesh believed that every human being deserves to lead a dignified life and that education should be accessible to all for their progress.

Project Roti

Pehli Asha Foundation started "Project Roti" with the support of students of Delhi Colleges on 2nd Feb, 2020. According to a report, 20 lakh people in India did not have food to eat. The motto behind the project was to feed and bring a peaceful smile to the faces of needy children, who could not afford even two square meals a day. The project was implemented in 5 phases and food was distributed in different slum areas of Delhi.

Project Insaniyat

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Project Insaniyat was started on 10th Feb, 2020, during the covid period. Its main motive was to inculcate humanity, sensitivity, and softness from within the people. The volunteers spent time with old people and tried to make them happy. Slowly they also started visiting orphanages and similar other places to help needy people. Winter clothes were distributed to the needy sleeping on the sides of roads in order to save them from the chilling cold season and keep them warm. The purpose of this project was to spread happiness in society to the victims of the pandemic or any other tragedy.

Project Bejubaan

Project Bejuban was started on National Pet Day celebrated on 11th April 2021. The aim was to help street animals by feeding them and providing shelter for them. Mr. Nitesh was always kind to others and after seeing the abandoned street dogs, his heartfelt bad, and he thought to start this campaign. The campaign was started from site-4 Sahibabad, Ghaziabad. Many college students volunteered to devote their precious time to the project and take care of street animals in their neighborhoods.

Networking and Key Partners

In October 2020 Mr. Ray got associated with another great organization, Sanganeria Foundation along with his NGO. In this foundation, there were trainers employed to train people in sewing, parlor courses, computer courses, etc. free of cost and Mr Ray was assigned the task of managing them. The Foundation provided all the required items like the sewing machine, computers, etc. to the trainees and believed in the development of each one to enable him/her to earn their livelihood.

The Road Ahead

Five years down the line, Mr Ray wished to see Pehli Aasha as a stepping stone for the underprivileged in our society. He had a strong belief that if each person in our society helps at least one person, it will be a great achievement for our organization and this organization will emerge as the first hope among people of our society so that they can believe in our good deeds for them.

Questions for Discussion

Q: What is the contribution of NGOs like Pehli Asha in bringing about individual & social change?

Q: Analyze the potential strengths and constraints while engaging student communities for social work.

Q: What are the different levels of community involvement? How can Pehli Asha move up the ladder?

Q: How do you think the NGO can have sustainable operations? Give your recommendations.

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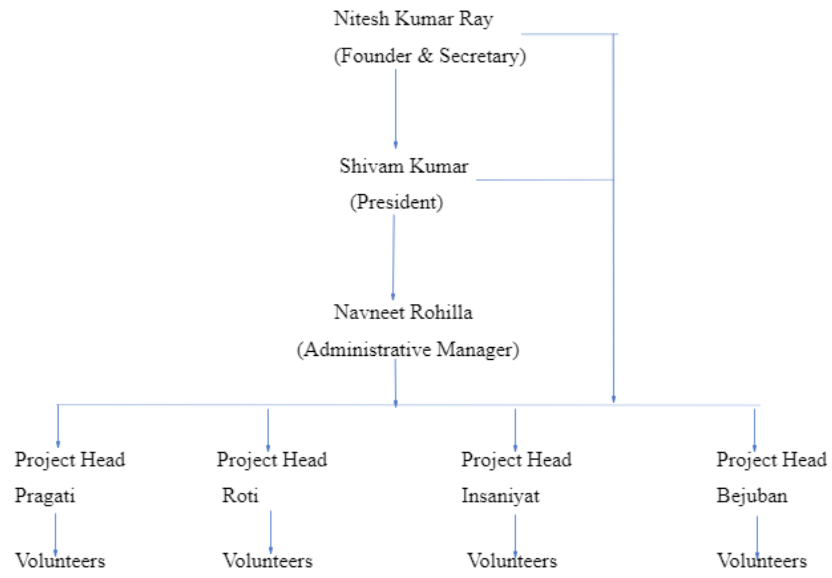
Annexure - 1

Core Team and Organizational Structure of Pehli Asha Foundation



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Annexure 2: Various Projects with Delhi Colleges

Project ROTI

Project INSANIYAT

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Project PRAGATI





Project BEJUBAAN





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Teaching Notes

Community Engagement Initiatives by Pehli Asha Foundation: Mobilizing Youth for a Social Cause

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Case Synopsis
We see many nongovernment organizations coming forward to engage with the community in order to uplift them and move towards inclusive growth. The objective of such initiatives may be health, education, employment, and basic facilities for food, clothing, and shelter. Pehli Asha Foundation is one such initiative by its Founder, Mr. Nitesh Ray. Having started in the year 2017, the foundation had done commendable work in the area of providing basic necessities to the underprivileged in the National Capital Region of India. The foundation has collaborated with students from various colleges in Delhi and created student bodies that have collaborated in their efforts for the social upliftment of the needy and poor.

Target Audience: MBA, Entrepreneurship, Executive MBA students

Course: Community Engagement

Learning Objectives: The case aims to equip management students with the following skills:-

- Understanding the role of NGOs in social upliftment.
- Appreciating the contribution of young students in community social work.
- Discussing the various levels of community engagement.
- Analyzing the different funding options available to NGOs.
- Devising a Sustainability Strategy for NGOs engaged in social work.

Session Plan: - The case is most effective when discussed using the syndicate method where the facilitator divides the class into diverse student teams who read, discuss and work collaboratively for analyzing the case before the class. The case should be given at least one week before the class discussion and the students should be advised to go through the suggested readings beforehand.

Questions and Suggested Answers:-
Q.1: What is the contribution of NGOs like Pehli Asha in bringing about social change?
NGOs like Pehli Asha work for the social upliftment of society in terms of health, education, poverty alleviation, etc. NGOs make efforts for protecting and creating awareness about the rights of the disadvantaged and marginalized sections of society. Social transformation is a process of social change toward the creation of fundamentally better social, economic, political, cultural, and environmental relationships. NGOs play an important role in

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implementing social development program that offers a long-term solution to widespread inequalities in society.

Q.2: Analyse the potential strengths and constraints while engaging student communities for social work.
For implementing social development projects, NGOs need to make concerted efforts to nurture their relationships with a variety of community partners. It takes significant time and energy to develop a productive working relationship with a community partner, to design projects that meet both learning and community goals, to manage the logistics of the projects as they unfold, to engage students in special skills training, and to reflect on the meaningfulness of projects with students. NGOs need to have established community partners and project ideas to suit a wide variety of learning objectives. They therefore can help make the planning much easier and help establish a positive working relationship between NGOs, students, and community partners.

Q.3: What are the different levels of community involvement? How can Pehli Asha move up the ladder?

Increasing Level of Community Involvement, Impact, Trust, and Communication Flow

Outreach	*Consult*	*Involve*	*Collaborate*	*Shared Leadership*
Some Community Involvement *Communication flows from one to the other, to inform* Provides community with information. Entities coexist. Outcomes: Optimally, establishes communication channels and channels for outreach.	*More Community Involvement* *Communication flows to the community and then back, answer seeking* Gets information or feedback from the community. Entities share information. Outcomes: Develops connections.	*Better Community Involvement* *Communication flows both ways, participatory form of communication* Involves more participation with community on issues. Entities cooperate with each other. Outcomes: Visibility of partnership established with increased cooperation.	*Community Involvement* *Communication flow is bidirectional* Forms partnerships with community on each aspect of project from development to solution. Entities form bidirectional communication channels. Outcomes: Partnership building, trust building.	*Strong Bidirectional Relationship* Final decision making is at community level. Entities have formed strong partnership structures. Outcomes: Broader health outcomes affecting broader community. Strong bidirectional trust built.

Reference: Modified by the authors from the International Association for Public Participation.

Q.4: How do you think the NGO can have sustainable operations? Give your recommendations. Sustainability planning is an important step for NGOs as it prepares an organization to deliver positive outcomes in the absence of primary funding. It is a challenge for NGOs to ensure a steady flow of funds for executing their projects and programs. In order to ensure long-term impact, it is necessary to integrate sustainability principles in their ongoing projects and this can be an effective way to ensure long-term impact. NGOs need to plan for 3 kinds of sustainability:
Financial sustainability: It refers to ensuring a steady flow of funds and generating revenue for maintaining and continuing the organization's work.
Institutional Sustainability/Organizational: It refers to ensuring proper working of the organization and institutions that were developed as part of the project.

Programmatic Sustainability: It means continuing the organization’s projects and programs in the absence of donor support.

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Feedback: - The case has been pilot-tested in a seminar with 45 MBA students and was found to be very effective in inciting the students to discuss and derive community engagement strategies for social work and development.

Additional Readings:-

1. What is Community Engagement?
   https://aese.psu.edu/research/centers/cecd/engagement-toolbox/engagement/what-is-community-engagement
2. Social and Behavioral Change: Community Engagement
   https://www.unicef.org/tajikistan/social-and-behaviour-change-community-engagement
3. Types of Community Engagement
   https://students.morris.umn.edu/community-engagement/types-community-engagement
4. Five Steps to successful community engagement and mobilization
   https://globalcommunities.org/blog/five-steps-to-successful-community-engagement-and-mobilization/
5. Principles of Community Engagement
   https://www.atsdr.cdc.gov/communityengagement/pce_what.html

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Impact of government programs on the liquidity crisis in the Indian MSME sector

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Abstract
Micro, Small, and Medium Enterprises (MSME) are known as the foundation of the Indian economy. More than 79 million SMEs exist in India. It employs in rural areas that contribute 45% of total employment. It is the second largest employment-generating sector after agriculture. MSME reduces regional imbalances and promotes exports of domestic products. But due to the liquidity crunch in the last few years, the MSME sector is facing a range of difficulties. In previous research, the credit gap is analyzed but the factor that can be bridging this gap is not. Thus, this paper suggests measures to bridge the gap and evaluate the liquidity crisis in the MSME sector and the factors affecting non performing assets.
Keywords: MSME; Liquidity crunch; Government schemes; Non-Performing Asset; Credit gap

I. Introduction
Micro, small and medium industries (MSME) are known as the backbone of the Indian economy. It constitutes 79% of million small and medium-sized industries. The overall manufacturing output consists of 45% from MSME. It is the biggest contributor to our G.D.P., i.e., 28%. After agriculture, it is the next job generator, providing jobs to 11 million people. Suresh (2022) analyzed that It is critical to raise awareness about better communication strategies and the use of talented media to provide benefits to eligible beneficiaries. The vicious circle of poverty must be broken by creating a suitable environment to embrace and apply for government entrepreneurship and development programs. The latest media must be used to provide benefits for eligible beneficiaries.
The government has taken several measures to address the issue of liquidity in the MSMEs sector, but all of them are insufficient. Due to reduced Operations and dipped demand, MSME is facing a liquidity crunch (Periodic Labour Force Survey 2017-2018) 90.6% of India's workforce is engaged in informal unregistered enterprises that didn’t get the benefit of MSME revival govt schemes. According to the International Finance Corporation (November 2018), the addressable credit gap in the MSME sector is estimated to be Rs 25.8 trillion (Rs 25.8 lakh crore) or $345 billion as per the current currency exchange rate. UK Sinha Committee (June 2019) report constituted by the Reserve Bank of India (RBI), analyzed that the overall credit gap in the MSME sector is estimated to be Rs20–25 trillion (Rs20–25 lakh crore).
Narayan Rane (MSME Minister) said the public authority had not attempted a particular report to gauge any specific study to estimate the current credit gap which is vital to consider minimizing the difference. The previous research discussed the financing gap only. Due to a lack of sufficient funds for the informal sector, outdated technology, insufficient data regarding credit and a high level of non performing asset MSME sector need to be focused.
This paper extends the contribution more by finding out the reasons and suggesting strategies for bridging the financial gap in the MSME sector. There are the following objectives of our

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study: a) To Study Credit Flow Schemes on the liquidity of the MSME sector; b) To Identify the reason for the financial gap in the MSME sector; (c) To study the relationship between credit supply and Non Performing Asset in MSME sector.
This study is structured in the following way: Past studies are discussed in section II.DATA Collection and Research Methodology are described in section III. The next section includes the Discussion on the Analysis of Secondary Data. The final section 5 offers a Conclusion and Suggestion.

Literature Review
During the lockdown, the MSME sector was worse hit due to a reduction in cash flow. Due to supply chain disruption, migration of workers, ban on traveling, closures of malls, educational institutions, and theatres, disruption in export and import badly hampered the MSME sector. COVID-19 affects many spheres including the financial market, international trade, poverty, income, and unemployment, but the impact is severe on manufacturing, trade, and MSME sectors Ashwani (2020). According to the All India Manufacturers Organisation (A.I.M.O, June 2020), 43% of self-employed and 35%of MSMEs are shutting down their business. Due to no chance of recovery, thousands of people lose their jobs working in small businesses. Srivastava (2020) As per International Monetary Fund, the global economy is contracting by 4.9 percent in 2020 due to the pandemic which is worse than the financial crisis that emerged in 2008-2009. The MSME sector is more focused nowadays but it needs to be concentrated on bridging the financial gap and reducing the % of NPA in the MSME sector
Kumar, (2022) in his research emphasized that the vicious circle of poverty must be broken by creating a suitable environment in embracing and applying for government entrepreneurship and Development Programme. This study also explains the importance of the latest media in order to increase the number of eligible beneficiaries. Wehinger Gert (2014) analyzed that to reduce the burden on public finance the schemes providing credit guarantees must be enforced as a tool of bridging the financing gap in the MSME sector. During the 2008-2009 crisis, stringent financial conditions were encountered by these MSMEs and the credit guarantee schemes were represented as an instrument of choice for policymakers in many countries. Another major constraint is the lack of awareness about the service represents a key obstacle to burden uptake by SMEs
Chandana, and Manumit (2019) examined the factors affecting the growth of MSME and identified financing gaps. The study found that informal or unregistered MSME which is higher in prevalence is unaccounted for due to scarcity of data. The banks are shying away from lending to this sector as they don’t consider it as a lucrative sector. In order to find out the financing gap in MSMEs the major problem faced by MSMEs and banks needs to be identified and corroborated.The bankers' point of view needs to be focused on MSMEs' problem of financing. The governments of most countries set up large organizations and announce several schemes to boost this sector but the role and performance need to be accounted for more.
Udell. F. Gregory (2020) studied the key challenges that affect SME access to finance and the global financial crisis. It suggests that the regulatory flexibility may mitigate the loan supply effect and the pandemic causes a recession that is likely to cause a banking crisis. The rapid evolution of the pandemic created a collapse in demand that has already created an acute firm solvency problem unlike the early stages of the global financial crisis. Narada Gamage (2020) analyzed the barrier for SMEs they are exposed to a number of challenges as a result of globalization, including resource scarcity, lack of technical skill, inadequate knowledge of the relevant sector of foreign culture, a lack of innovative capacity, and the inconvenience of moving global.. The study gives suggestions to mitigate the barriers to getting innovative work and creative capacities, and the fast reception of data correspondence innovation. The chance

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for more effective utilization of resources, potentiality to make new foreign connections with vendors to lower the cost, complete access to the internet and low-cost web host must be focused otherwise lag of ICT development can create drawbacks on SME globalization procedure.

I.F.CAdvisory (2013) analyzed the credit gap for the informal and formal sectors. The finding of WBES informal sector survey across the 15 developing economies concluded that access to finance is the leading operational challenge that hinders the growth and sustainability of the business when its size grows it becomes more serious. Other operational challenges faced by this sector include crime, theft, disorder, access to land, and corruption. In the formal sector, the same survey reveals that the problem is less acute if the size of the firm grows. Financial intermediaries face so many challenges when servicing small and informal firms include lack of skills and literacy of the owner of the MSME, poor customer knowledge, low profitability, and proper land registry certificate.

Vazquez and Sensini (2020) explored the factor that influences the working capital management of SME productivity strategies on Argentina's agro-modern firm benefit. On the basis of Data collected from 326 companies, it was concluded that there is an inverse relationship between firm profitability and inventory, suggesting that investing in inventory and having more prominent expansion from providers lead to extra cost. Hesary and Yoshino (2015) examined that the only major source of finance in Asia for SMEs is the banks. With the help of credit rating, it is necessary to distinguish between healthy and risky companies before giving loans to control non-performing assets. We can carry out statistical analysis on the basis of their quality to facilitate bank financing for SMEs. Vidyarani, K, and T. Maheshkumar (2022) analyzed the MSME inter-regional variation in determining formal credit access in India. The review showed provincial contrasts in surveying formal credit-squeezing moves for MSME in India because of which the area is going through a serious shaper crunch. The government needs to rethink its actions and execute the provincial explicit program to establish a productive climate for the MSME in getting formal credit. In previous studies, emphasis is given to the credit gap but after considering the previous work this study suggests how we remove the financial gap and other major problems like liquidity crunch in the MSME sector.

II. Data collection and Research Methodology

For this paper we have collected secondary data from MSME reports, International Finance Corporation working paper, R.B.I reports, and SIDBI annual report. To accomplish the above research objectives descriptive and analytical designs both are used. Secondary data is analyzed in a quantitative manner. Basically on the basis of the reports conceptually we discussed below:

1. **Credit flow schemes on the liquidity of the MSME sector:**

Several schemes were introduced by the government to provide financial assistance to the MSME sector during Covid.

a) Emergency Credit Line Guarantee Schemes: It was introduced by the Ministry of MSME on 10 Dec 2021 a loan of Rs 137587.54 crore was sanctioned and Rs 92090.24 crore was provided for assistance in operational activities till 3 Aug 2020.

b) The problem of delayed payment is resolved by introducing the Trading Receivables Discounting system in 2017.

c) To boost up stressed MSMEs banks provide subordinate debt i.e. up to 15% of promoters' Stake or 75 lakh whichever is lower as equity or quasi-equity.

d) Pradhan Mantri Mudra Yojana was announced on 8 April 2015 to provide institutional finance up to Rs 10 lakh.

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e) Under government e-marketplace 409937 are the service provider i.e. 57.89% of order value under Udyam Registration.
f) MSME is creating more than 11.10 crore jobs in manufacturing, electricity, trade and other services.
After considering the credit flow schemes on the liquidity of the MSME sector the total credit demand needs to be focused on. India's all out assessed credit request is to be 37 trillion yet the general stock of money from sources is assessed to be Rs14.5 trillion the credit hole in the MSME area is 20-25 trillion The ministry of MSME launched several schemes to address the needs of the MSME sector. To make the schemes more successful there are seven components of the MSME that contribute as aligning elements as government initiatives must be considered. The gap in various schemes needs to be focused and mapping must be done on the basis of the following ground: Human capital, Knowledge, Finance, Technology, Infrastructure, Markets, and Insurance policy. With the help of the below-mentioned Table, the various sources of credit cash flow to the MSME sector will be studied.

Table 1: MSME Sector Credit Cash Flow (Amount in Billion)

Year	PSB 1	PSB 2	FB	NBFC	SCB
15-Mar	8526.89 (12.44%)	2815.48 (13.93%)	367.87 (6.85%)	268.48 (234.05%)	111710.26 (12.61%)
16-Mar	8205.48 (-3.77%)	3590.85 (27.54%)	363.73 (-1.13%)	880.13(207.22%)	12160.07 (3.84%)
17-Mar	8289.33 (1.02%)	4309.62 (20.02%)	365.02 (0.35%)	1113.10 (26.47%)	12963..98 (6.61%)
18-Mar	8645.98 (4.30%)	4107.60 (-4.69%)	488.81 (33.91%)	1441.40 (29.49%)	13242.39 (2.15%)
19-Mar	9367.24 (8.34%)	5717.04 (39.18%)	691.37 (41.44%)	1622.17 (12.54%)	15775.66 (19.13%)

Source: RBI reports
Notes: Parentheses represents outstanding amount; PSB 1: Public sector bank; PSB2: Private sector bank; FB: Foreign Bank; NBFC: Non banking finance company; SCB; Scheduled commercial bank

The credit flow to MSME from march 2015 to 2019 in public sector bank is increased from 8526.89 to 9367.24(billion), in private sector bank increased from 2815.48 to 5717.04 and major change shown in non-banking finance company (NBFC) i.e. 286.48 to 1622.17 (billion) which indicate that now a day's NBFC play a vital role in credit flow to MSME sector. The foreign bank is also considered a major source of supply in 2015 367.87 and in 2019 it rises and becomes 691.37. Make in India, Start-up India, Simplicity of carrying on with work and GST is a part of the other major started working with development of the area. The demand for credit flow is more than compared to supply. The government needs to inject more liquidity into this sector.

2. To identify the reason for the financial gap in the MSME sector

At present, the major problem faced by all MSMEs is the short-term financing gap that arises due lag in payment of bills (i.e. the difference between raising an invoice and its due date). If buyers delay in payment this gap increases. According to the Union Minister of MSMEs, MSMEs collectively are yet to receive more than 5 lakh crore (USD 68 billion) in outstanding payments from the central government, state governments, PSUs, and the private sector—a sum that amounts to nearly 2.5% of India's GDP, as on October 2020. The concept of the financing gap is explained with the help of the below-mentioned figure 2. In this figure, it is shown that the total credit demand is estimated to be INR 105.49 lakh crore, unaddressable or excluded demand is 49.58 % but the formal supply of debt is only 16.94 lakh crore which is

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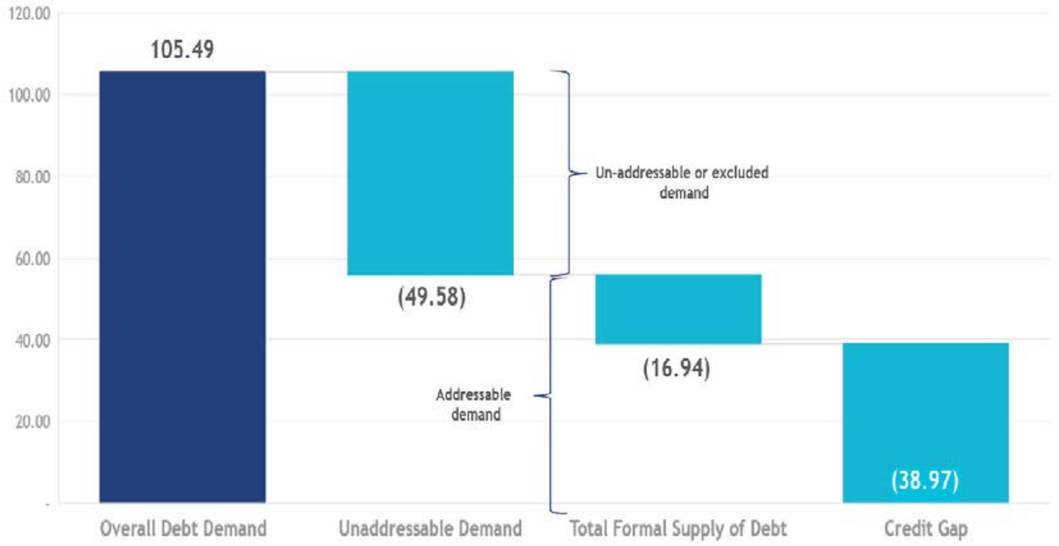
less than one-sixth of the demand. Out of this formal supply of debt, only 27% is for micro, 40% is for small and 33% is for medium enterprises. NBFCs account for 9.7%, private sector banks 38.7%, and public sector 51.6%. The major contributor to the MSME sector is PSB (public sector bank). But the NBFC and private sector banks are trying hard to improve their share and doing well. But During lockdown the government announces packages to maintain liquidity. The market share of public sector banks increased from 49% in March 2020 to 51.6% in June 2020. The major reason for this credit gap is out of total credit demand. The addressable demand is only 53% because handicraft, food, part manufacturing industries, and many more micro, small, and medium industries earning high profits still follow the traditional credit system.

Figure 1: The MSME credit gap



Source: MSC analysis and IFC report (2018)

3. To study the relation between credit supply and NPA in the MSME sector

The major primary reason why NPA arises in the MSME sector is: a) Delay in debtor collection; b) Extending credit limit without any credit check; c) Mismatch between receivables and payable i.e. adjustment of capital expenditure with the working capital instrument.; d) Low awareness about bank Practices, credit discipline. In order to understand the behavior of MSME accounts why accounts are going bad**.** The CIBIL MSME RANKING positioning table will make it clear. The CIBIL Micro, Small and Medium Enterprises ranking system is a vital tool that helps financial institutions in accessing the credit risk that is associated with MSME so that lending decisions can be taken easily. Different categories of account can be assessed with the help of 1. CMR 1 to 3: Shows a good track record; 2. CMR 4 to 7: Delinquent but never an NPA; 3. CMR 8 to 10: Chances that the asset will turn out in NPA incoming 2 years. The below Table no. 2 shows the different categories of CMR which indicate the probability of

Borrowing and turning NPA.

Table 2: CMR (CIBIL MSME RANK TABLE)

CIBIL MSME Rank	Category Bad Rate	Bad Rate Delinquent Not NPA
1	1.60%	0
2	1.90%	0
3	3.40%	5.1%
4	7.20%	8.00%

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5	10.00%	11.30%
6	13.50%	15.50%
7	22.80%	24.20%
8	46.20%	54.20%
9	75.90%	83.40%
10	96.70%	-7.18%

Source: CIBIL Transition

According to the above table CMR-1indicate lowest risk probability of default in each rank the risk of default increases and in CMR-10 the probability of default is highest or it can be assumed that this category belongs to already defaulter borrower. CIBIL MSME Rank gives early sign about NPA and helps to make the lending process transparent.

IV Discussion

According to the analysis done with the help of data collected between June 2018 to June 2020 the non-performing asset in P.S.B, (2018-2020) is increasing from 16.7% to 18.6%. Private sector banks also show a hike (from 3.8% to 5.8%). It is observed that in Non-Banking Financial Institutions India has exponential growth in non performing assets which must be controlled to maintain liquidity. According to R.B.I. financial stability report, the gross non performing asset fall i.e. 9.3 percent in March as compared to 11.3 % last year i.e. 2021 but the asset considered as bad is increasing rapidly. Due to MSME restructured portfolio . i.e. (Rs 46186 crore) 2.5% of this amount is generating stress in the market. In June 2022 financial stability report suggested that even after the high inflation in the global market due to the war in Europe and post covid impact Indian economy is recovering. At present Banks and Non-Banking financial institutions have enough capital buffers to bear shocks. The CRAR (Capital to risk-weighted Asset Ratio)of scheduled commercial banks is rising to 16.7% and the gross non performing asset (GNPA) ratio fell to 5.9% (i.e. Six year low)in March 2022. It also indicates that the micro stress test shows that scheduled commercial banks are now sufficient enough to comply with minimum capital requirements under severe situations and during the last month of December 2022 it is expected that gross non performing assets will be at 8 or 9 percent.

V. Conclusion and Suggestions

During the pandemic MSME is the sector that strikes hard despite announcing packages and loan restructuring schemes by the government and the Reserve Bank of India. The bad loan in September 2020 is 8.2% but now it increases up to 9.6% of gross advances of Rs 17.33 lakh crore. During the fourth Quarter of the financial year 2021-2022, the non-performing asset in the micro small and medium industry bounced by 12.59 % i.e. 2.95 lakh crore from Rs 2.2 lakh crore. To motivate budding entrepreneurs MSME put efforts to survive and launched Innovative schemes in spite of this MSME IDEA HACKATHON 2022 was also started by the government to promote new ideas. But Government need to focus more on regulatory and policy aspects to increase access to finance The credit infrastructure must be improved to increase the new registration .The government needs to focus on improving the ease of doing business ranking so that FDI increases in the MSME sector .to develop this sector gender discrimination must be removed and government needs to put more effort into promoting Women-owned enterprises MSMEs must be promoted by the government to generate employment opportunities for women.

There are the following suggestions: To enhance private sector funding contribution; MSMED Act 2006 should be amended and invoices should be mandatory to upload above a limit specified by the government; Proper authentication check of business correspondence by Know your customer (KYC) to secure customers from corruption, money laundering, fraud,

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terrorist funding, etc. Now a day's rural enterprises are struggling hard the government needs to provide more credit schemes to rural MMSMEs Government at the union level and state level should try to collect data on unregistered MSMEs by making registration a precondition for availing benefits; To extend the collateralized free loan limit from 10 lakh to twenty lakh, export promotion council for MSME sector should be strengthened; foreign direct investment policy must be focused toward the local MSME sector.

Limitations of this study

The study is based on secondary data collected through previous research, Annual reports, etc but to make it more practical primary data must be included.The analytical tool needs to be used in analysing the data. The scope of study is also limited to financial constraints.

Future scope of this study

The extent of additional exploration might be in formalization of credit supply in MSME sector.technological scale ,slack in installment of bills.

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Promiscuity beyond a one-night stand: Anthropomorphic Brand Love enhanced Customer Citizenship Behavior – A Quasi-Experiment

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Keywords: Brand anthropomorphism, Brand love, Customer citizenship behavior, Brand promiscuity

Abstract

Purpose: In this paper, we present five studies that develop and test the role of brand anthropomorphism and brand love in determining customer citizenship behavior moderated by promiscuity behavior.

Design/methodology/approach: In Study 1, we empirically test the influence of brand anthropomorphism on purchase behavior using Tobii Eye Tracker. In Study 2, we systematically analyze the role of brand anthropomorphism in determining brand love through a laboratory study using online simulations, and sentiment analysis was performed using Leximancer Software.

Findings: We theorized that brand anthropomorphism would increase the love towards the brand, which in turn enhances customer citizenship behavior. Formulating and validating a measure in five studies, we examined a research model of the effects of brand love in two additional settings (laboratory and experimental group) where we anticipated that brand promiscuity would negatively influence customer citizenship behavior.

Research limitations/implications: Despite having many strengths and admitting a robust mixed-method research design, our paper is not without limitations, which we believe will gear up guidance for future research.

Practical implications: To reduce brand promiscuity, managers can publicize the customers association with the brand by making others notice, as societal disapproval is ascertained to be the primary reason for sticking to the same brand and not exploring other brands.

Originality/value: Our empirical results, alongside the theoretical framework suggested in this study, provide academics with a point of reference for instructing brand management.

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Embracing Technology Enabled Organizational Agility in HR through Metaverse and Measuring its Impact on Drivers of Balance Scorecard

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Keywords: Metaverse, Strategic Human Resource Management, Organizational Agility, Balance Scorecard.

Abstract

Aim: This research aims to understand a novel aspect of the impact of Metaverse on Strategic HRM in the context of Organizational Agility and measure the performance of Metaverse on the drivers of the Balance Scorecard.

The motivation behind the study: The Metaverse is one of the breakthroughs that has happened recently and certainly the pandemic does give it enough leverage to be a technology of the future. However, the specific impact of Metaverse on the strategic domain of HRM in the context of Organizational agility is seldom discussed. By having a vision for the future and a tolerance for the uncertainty, volatility, and transition that the Metaverse will bring about, the HR function should be at the forefront of technological innovation and transformation.

Design/methodology/approach: To carry out the present study, a systematic literature review was conducted through previous research papers, journals, and blogs on the key concepts of Metaverse, Strategic HRM- Balance Scorecard, and Organizational Agility. A theoretical framework is being constructed to understand the implications of Metaverse, Organizational Agility, and Balance Score Card.

Findings: Through a theoretical framework and systematic literature review, the author(s)have explained the impact of the Metaverse on drivers of the Balanced Scorecard and also focused on implementing the concept of the Metaverse as a long-term strategy.

Practical implications: This study will help researchers from various fields like management, technology, and Human resources to understand the metaverse and its usage to enhance the productivity of the organization. Moreover, this study provides scope for future research on the concept of Metaverse across various emerging domains of Strategic HRM like employee engagement, Employee Onboarding Talent management, etc.

1. Introduction

Whether we are prepared or not, the future has already knocked on our doors with the advent of the Pandemic forcing workplaces to think about new workplace landscapes which would be able to deal with uncertainty in times of uncertainty by creating innovations. The five-day working norm has changed from going physical to virtual working and employers need to be more agile to test the platform of Metaverse – the new immersive world. The possibilities through this new storm have left many enthralled and confused. The metaverse concept is not entirely new. It was created in 1992. Price water house Coopers wrote in his science fiction novel Snow Crash that Metaverse was founded in 1992 and writer Neal Stephenson invented the word "metaverse". Roughly 23.5 million occupations will use AR and VR for training, business meetings, or customer service by 2030. From 2026 many people will start

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spending some time every day on the Metaverse (https://www.thehrdigest.com/can-metaverse-become-the-part-of-hr-technology).

The pandemic has taught us some very significant lessons as remote work is the most in-demand option among employers and individuals alike. Both technology and employee training have advanced quite quickly. Prior to the outbreak, businesses employed a mix of offline and online methods to train their employees. On many platforms, modern technologies are making it possible to demonstrate how technology-enhanced training can increase employee productivity. Many businesses that are making use of virtual platforms, plan to deploy remote working permanently. For Example-The industrial metaverse announcement by Microsoft shall allow the wearing of augmented reality handsets for managing supply chains virtually. Employees want to work and study whenever and wherever they choose, pushing human resource managers to seek out more interesting work and training environments. According to a recent Accenture survey, 90% of executives believe their present training methods should be more effective and efficient, and 94% of employees claimed that they would have stayed longer if the company would have invested in their professional development. Jobs that formerly required physical connections will now have virtual options, resulting in a significant increase in freelancing and remote job opportunities. One such fiction which shall altogether change the experience of Human Resource Function-The Metaverse is a three-dimensional world wherein individuals use personalized avatars being replicas of the user. It is a virtual world where individuals can communicate with each other in an immersive way, more realistic and more engaging. The paper also emphasizes the concept of Organizational Agility. Organizational agility is not a new concept, in fact, a long-adopted practice accepted worldwide to transform workplaces and their various functions, so HR function can't be naïve as the aim of HR in modern times could be to adapt and evolve to support individuals, strategic and organizational agility. HR needs to design new hybrid working policies to maintain healthy metaverse working practices in an organization (Robinson, Maria, Moraes, 2022). A wonderful example of Microsoft using Mesh makes online collaborations fun-loving, people engage more in their body language, having water cooler conversations, and having more engaged conversations in team meetings. When Organisations work toward agility they need to focus on the financial aspect, customer satisfaction, better and refined internal process, and enhancement of Learning and growth to stay competitive and attract the best talent which has been already focused on the concept of Balance Scorecard as suggested by Norton and Kaplan. Despite a lot of attention being given to the Metaverse as a technology for the future in manufacturing, production, marketing, or retail per se, the literature supports very less in the context of the exclusive capabilities of the Metaverse that can be a turning point in leveraging the function of HR in the modern scenario of agility. The paper tries to establish the impact of the Metaverse as a strategic HR practice in the context of Organisational Agility towards measuring strategic performance outcomes which can be measured in financial and non-financial terms as emphasized in the Balance Scorecard suggested by Norton and Kaplan which in itself is a management and measurement system to ensure the organization's performance through aspects of Balance Score Card. Not only implementation of Metaverse is important but also its measurement as a strategy is important. The Balanced scorecard is an essential component when positioned as a key driver for organizational change.

2. Literature Review

2.1 The Metaverse

A metaverse is a virtual environment in which a person can interact with both a computer-generated world and other people. Metaverse term was invented in 1992 and published in Neal Stevenson's book named Snow Crash (Stephenson, N,2003). This is a shared virtual

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environment for online communities that is interactive, immersive, and collaborative (Park & Kim, 2022). Metaverse is an interactive network with 3D virtual environments that is continuous and immersive. (Collins, 2008). Metaverse with its infinite capacity of a virtual world wherein the interaction of many people can possibly be commonplace (Messinger et al., 2009). It supports a large number of people to boost social significance. Three components: are required to implement metaverse (i) Advances in hardware; (ii) innovation in expression and recognition drivers; and (iii) Accessibility in the subject matter. (Park & Kim, 2022).

Metaverse is the seamless integration of our physical and digital lives, resulting in a single virtual world where we can learn, play, relax, interact, and connect. The Metaverse is a 3-D imaginary depiction built entirely upon the well-known virtual reality gaming experience. A large influx of our real lives is now hybrid and virtual (Hacker et al., 2020). People working in the physical world may now work fully in the world of Virtual reality as virtual teams. Metaverses can be described as geographically scattered individuals depending upon technology alliance for completing their tasks. (Dubé et al., 2002). A virtual team needs collaboration much more effectively in a virtual world in presence of specific contextual factors and also the influence that leadership might have on these virtual teams. Due to advancements in technological capabilities, the Virtual World is now skilled in effective interaction without physical enables (Schroeder et al., 2006). Metaverse is an Internet analogy that combines the powers of social networking, AI, Augmented Reality, and Virtual Reality. (*The Future of the* Metaverse – *Imagining the Internet*, n.d.). The metaverse has the potential to fill the void between leaders who want to remain connected with their employees and teams who want the flexibility of working remotely. companies related to computer games and social networks like Facebook is a recent example relating to it are outlined throughout the world, (Egliston & Carter, 2021). The creation of the metaverse has just begun, but avatars with built-in utility will be critical for digital identification.(*Digital Identity in the Metaverse Will Be Represented by Avatars with Utility*, n.d.). The metaverse can produce faces to enable real immersive experiences. People communicate both by verbal communication and as well as by non-verbal communication (Park & Kim, 2022). In all the above literature the dominant thing that comes through is the use of AI in the metaverse. AI technologies will be required to ensure that all functions are followed by the rules.(Hwang & Chien, 2022).

2.1.1 Metaverse can be categorized into three concepts:

- **Metaverse** – “it is a mixture of the transcendence and universe, which refers to a three-dimensional virtual. It is used to refer to a computer-generated environment in which both the real and the unreal interaction can be possible” (Metaverse Wiki.)
- **Avatars-** it is a digital representation of the user's existence created and characterized as an avatar. (Bailenson et al., 2005). A user's identity in the Metaverse will be represented via an avatar. The metaverse will most certainly be used for more advanced tasks as it progresses.
- **Extended Reality**- it is a combination of cybernetic reality, improved reality), and mixed reality.

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2.1.2 History of Metaverse

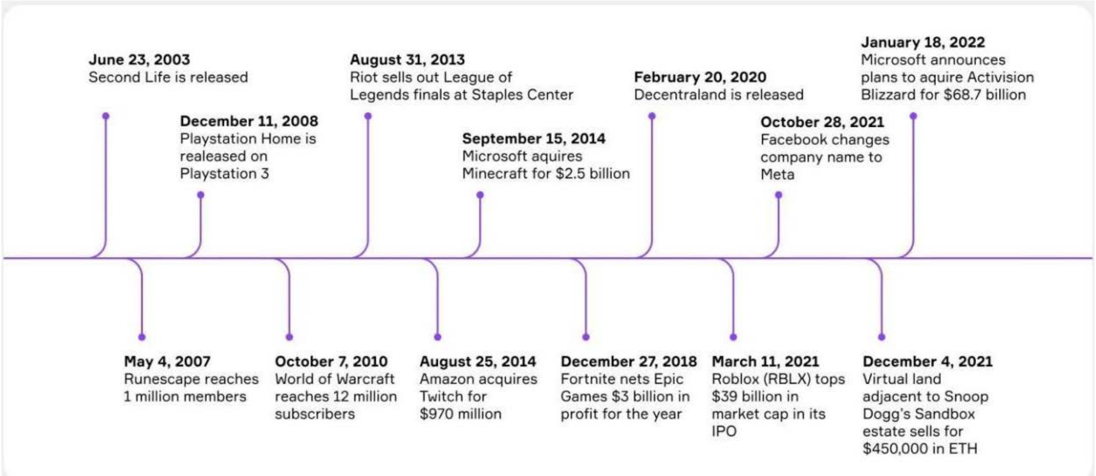

Figure 1. History of Metaverse
Source: Galaxy Digital (Taken from https://sensoriumxr.com/)

Table 1: Metaverse Features, Advantages, and Limitations

2.1.3 Features of Metaverse, Its Advantages, and Limitations.

Metaverse Features	Advantages	Limitations
The new era of social communication space	The covid era did not stop the employees from communicating socially even though not connected in reality.	The interactions are not real as the problems and solutions are not discussed in a face-to-face scenario.
High Immersion through virtualization	Active participation of employees as interest is increased transcending time and space.	As the environment is unreal the concept of mistaken identity can be there who want to feel their identity to be known even in the practice of learning something new.
Freedom to learn and discover the new concepts	Self-directed learning orientation	These platforms and applications collect data from the users which creates security issues.
Concept of Interaction and not mere telling about it	It creates a connection between the Employees and the material they're learning which enhances immersive learning.	The challenges of physical space to interact may occur as when a learner is fully immersed in a VR environment, they may not be aware of their surroundings.
Practice techniques on Avatars	It helps to know the weak areas of employees.	It's a cakewalk for employees who are well-versed in technology versus those who do not. The potential to learn physically and on the metaverse can be much more hyped on this feature.

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Encourage physical distance	Boosting the concept of workforce diversity and inclusion makes geographic barriers irrelevant.	Spending excess time in Metaverse may result in a loss of attachment to reality and serious mental health issues for Metaverse Users.
Advanced Technical requirements	5G technology makes the learning faster and more reliable.	It needs special skills and knowledge of hardware and digital tools needed to access the metaverse.
Physical Material requirements	It allows employees to make mistakes without exhausting physical materials which facilitates learning without hesitation and conserves resources.	The cost of creating a metaverse environment is too huge.

2.2 Balanced Scorecard

Implementation of a Balance Score Card in an organization increase Customer satisfaction and efficient financial performance (Amer, Faten & Hammoud, Sahar & Khatatbeh, Haitham & Lohner, Szimonetta & Boncz, Imre & Endrei, Dora 2022). In organizations, Balance Score Card drivers help to improve the performance of the organization (Cignitas, C. P., Torrents Arévalo, J. A., & Vilajosana Crusells, J. 2022). It helps to bring efficiency to an organization (Shalini, S., & Venkatesh, S. 2022). It is useful to measure organizational performance (Oliveira, C., Martins, A., Camilleri, M.A. and Jayantilal, S. 2021). It has a positive relationship with organizational performance (Tibbs, 2016). it enables organizations to form a strategy within the framework of the organization which is mentioned in their vision and mission of the organization. (Kefe, I. 2019). Each strategy formed under the framework with a Balance Score Card increases a few areas like Loyalty, Training, and efficiency (Syair et al., 2019). Balance Score Card helps to accomplish the goal of an organization with a high level of success and minimal failure (Setiawan, 2020). A balanced scorecard inspires managers in planning the strategy for an organization (Fisher, Greg & Wisneski, John & Bakker, Rene. 2020). It is a complex procedure in which a lot of skills and knowledge and commitment are needed (Scindia Chavan, Meena 2009). The implementation process requires a responsible center, responsible for customer needs, wants, strategy, and plan implementations (Nattarinee Kopecka 2015). Balanced Scorecard focuses on the quick decision-making process and evaluating the production process for sustainable growth in an organization (Deni Ahmad Taufik, Humiras Hardi Purba, Hasbullah 2021). Balance Score Card is a performance evaluation system strategic tool management which is able to make an organizational strategy for improving communication process, customer satisfaction, and for increasing financial performance (Quesado, P. R., Aibar Guzmán, B., & Lima Rodrigues, L. 2018). A balanced scorecard helps to improve the profitability of an organization by improving financial performance (Sahiti, A., Ahmeti, S., Sahiti, A., & Aliu, M. 2016). This strategy helps in converting goals into action. The Balanced Scorecard method helps to improve internal growth by preparing strong strategies for an organization (Joachim Schelp, Matthias Stutz 2007). A balanced Scorecard is a tool to measure organizational performance and prepare strategies to control the performance in an organization (V. K, Georgiev M. P. 2017).

2.3 Organisation agility

fastens the decision-making process and is good for collaboration internally and with business users (Rdiouat, Y., Bahsani, S., Lakhdissi, M., & Semma, A. 2021). organizational

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agility affects many factors, such as values, customs, and techniques, which support in achieving the objectives of the organization (Mário Franco, Jaiandra Guimarães & Margarida Rodrigues 2022). Organizational agility builds the appropriate deployment of social media analytics capability which helps to improve customers' perception of the organization (Zhang, M., Wang, Y., & Olya, H. 2021). organizational agility increase agility in an organization by influencing certain factors which affect positively the performance of the organization (V., Alvandi, M., & Arani, M. S. 2022). Organizational agility helps in developing a strong culture in an organization by enabling the development of information-sharing techniques which impact organizational performance (Salehzadeh, R., Pool, J. K., Mohseni, A. M., & Tahani, G. 2017). Organizational agility helps to design business processes and achieve organizational goals Alavi, S., Ramezanian, M., Bagheri, A., & Zeraati, V. 2020). In an organization, knowledge-intensive work-design systems contributed to organization agility which allows the organization more attentive to environmental movements (Li, X., & Holsapple, C. W. 2018). Decision-making agility and acting agility have a positive impact on the quality of work life (Wageeh A. Nafe 2016). A few factors like working methods, organization hierarchy, required knowledge and skills, and advancement of technology helps to bring variations in many places in an organization (Holbeche, L.S. 2018). The organizational Agility model establishes scores-based units in an organization (Gunsberg, D., Callow, B., Ryan, B., Suthers, J., Baker, P.A. and Richardson, J. 2018). A few factors like leadership, team working, empowerment and improvement, are connected directly with organizational agility (Eshlaghy, Abbas & Mashayekhi, Ali N. & Ghatari, Ali & Razavian, Mir. 2010). Organizational agility helps managers in building relationships with their employees and with external stakeholders (Eisele, S., Greven, A., Grimm, M., Fischer-Kreer, D. E. N. I. S. E., & Brettel, M. 2022). In an organization's management of knowledge, the variable has significant effects on the invention (Salimi, M., & Nazarian, A. 2022). It is the organization's competence in dealing with the fluctuations in the environment (Renzl, Birgit & Mahringer, Christian & Rost, Martin & Scheible, Lena. 2021). The agile leadership style is the best suitable style under organization agility which is helpful in the development of suitable frameworks (Attar, M. and Abdul-Kareem, A. 2020).

3. Objectives of study

1. To study the implementation of Metaverse on organizations.

2. To examine the role of Organizational Agility on Strategic HR, Metaverse, and Balance Scorecard.

3. To study the impact of the application of Metaverse on drivers/ perspectives of Balance Scorecard to measure organizational performance.

3.2 Research Methodology

This study is based on secondary data collected by other researchers for purposes that are different from this study. This research collected secondary data from studies related to metaverse, organization agility, and balance score card and research tried to show the impact of organization agility on the organization with metaverse and balanced scorecard drivers. The researcher used secondary data from authentic reliable sources. The advantages and reasons for using secondary data are quick, reliable, and cost-effective. For this study, the researcher collected information from 80 journals but only 50 journal data is used in this study, the rest 30 journal's data were not suitable for this research.

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4.1 Theoretical Framework

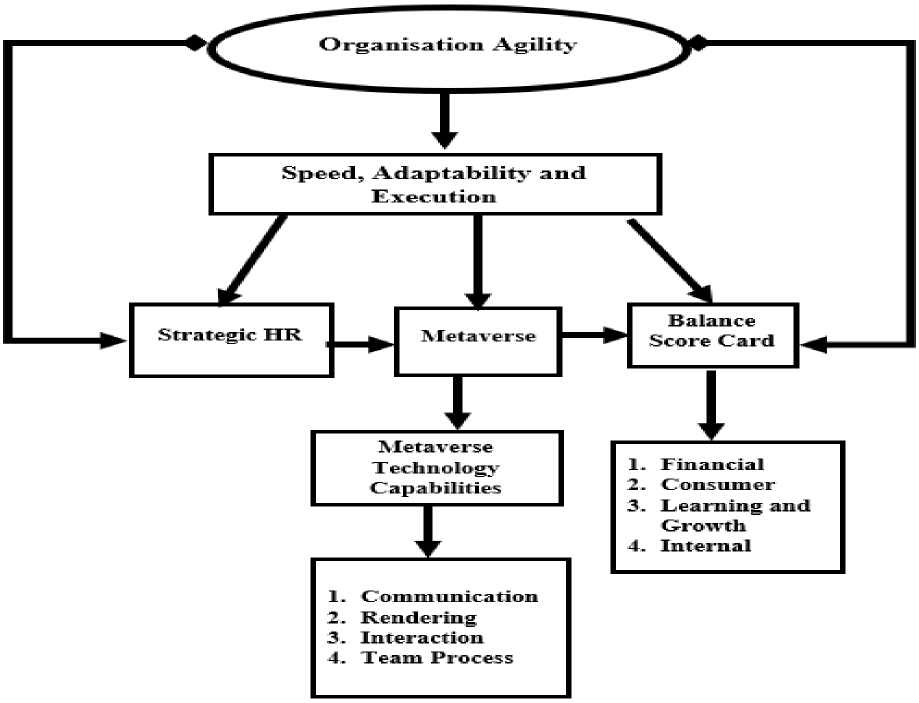

Figure 2. **Based on our own interpretation of the models of Components of Metaverse (the University of Nebraska at Omaha et al., 2009), Organizational Agility by (Saha et.al 2017) and Balance Score Card (Kaplan and Norton,1992).**

The paper proposes a conceptual model based on our own interpretation of three models for the components of the metaverse (the University of Nebraska at Omaha et al., 2009) Organizational Agility (Saha et al. 2017), and Balance Score Card (Kaplan and Norton,1992). The components of Metaverse capabilities have been taken from the conceptual model as suggested by (the University of Nebraska at Omaha et al., 2009). The component of Organizational agility as suggested by (Saha et.al) and the third component of the framework i.e Balance Scorecard based on the framework suggested by (Kaplan and Norton,1992). The framework initiates the development of Strategic HR practices which are formulated after careful analysis of numerous environmental factors. Strategic HRM aims to enhance innovation, flexibility, and competitive advantage. The strategic HRM integrates the concept of Metaverse as the new competitive advantage to empower employees, embrace disruption, and experiment in innovative ways for enhanced customer experience which could lead to mapping an organization's strategic HRM towards Balance Scorecard drivers. Three components Strategic HR, Metaverse, and Balance Score Card will highly be impacted by Organizational agility which is their ability to rapidly transform, change or adapt to the changes in the environment through speed, responsiveness, and learning capability. In an environment of change and ambiguity, it's important for organizations to understand how the metaverse brings back the human concept to work in the era of remote working and the four perspectives of Balanced Scorecard will support, improve, and drive overall business performance. The platforms for collaboration in the metaverse shall bring forth new levels of effectiveness, openness, and collaboration in agile work ecosystems by analyzing the company's balance scorecard in terms of Satisfied Customers and Employees, Flexibility Enhanced Productivity, and improved economic results.

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4.2 Discussion on each component of the model.

- **People/Avatars**- Avatars are the people who are represented in the universe. Representing themselves as people /avatars they appear and act in interaction with their environment. The metaverse will help in modifying work by encouraging communications with free-hand gadgets and avatars rather than laptops and cellphones, making group calls. Employees can engage in a meeting as an avatar or video call into a virtual room using a computer. The virtual representation of oneself through highly realistic 3D avatars that duplicate our body language as they speak entering the VR and AR environments using those avatars. for ex- the appointment of a virtual charismatic metaverse officer, a lion 'Leon' lion avatar in Publicis Groupe's.(*How to Use the Metaverse in Learning and Development*, n.d.) It would make employees in these avatars more engaged, productive, and happier at work.

Figure 3. Virtual Metaverse Image
Source: IMAGE: Publicis Groupe appointed a virtual Metaverse Officer, a lion. Publicis

The next component of the model as suggested by (the University of Nebraska at Omaha et al., 2009) discusses the possibilities of the Metaverse. The capabilities of the Metaverse as suggested by (the University of Nebraska at Omaha et al., 2009) in the model can be summarised below:

4.3 Metaverse Capabilities-The potential features of the Metaverse can be developed in the context of interactions in the metaverse.

- **Communication**- The mode of communication is avatar to avatar in the world of the metaverse. The interactions between employees in the metaverse would be a game changer as the communication would involve feedback, with the aid of virtual keyboards to bring out novel ideas on the desk. Using headsets people enter into a world of the virtual environment and communicate no matter which part of the world they belong to. The non-verbal communication applicable in the physical world applies to the virtual world too involving the use of emotions, tone of voice, body language, and gestures will affect the HR's functioning in numerous ways like in Recruitment, onboarding, Employee engagement, etc.
- **Rendering** – Creating life-like images on the screen to create personalization in their avatars in which people can decide how their avatar would look like would add a real twist to the practices of team management, employee engagement, onboarding, and talent acquisition. In the world of the metaverse, employees can generate their own avatars with the help of their own choices of clothing, avatar to avatar eye gazing, for more personalized focus and vividness where they will be having direct contact with other avatars like a mechanical engineer having his own avatar while working on a machine can

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create his own personalized avatar different from other employees to provide a more natural look or it could be an imagined environment where the new recruits could feel how the new workplace would look like and the interaction within the organization would look like

- **Interaction**- The pandemic reduced our mobility to a great extent due to which most of the activities were restricted however the use of metaverse in HR through interactivity and mobility. The metaverse technology would support sharing the content with other employees by increasing files, documents, or other relevant information. The metaverse could help employees by building text, figures, three-D models, images, pictures, etc. In those workplaces where just a sharing of documents isn't sufficient, this ability of metaverse to share a wide range of virtual objects would be really transformative wherein employees can use their virtual keyboard using VR and AR technologies wherever they move.
- **Team Process:** (the University of Nebraska at Omaha et al., 2009)with an example that is explained in VW helps to understand the capabilities of a metaverse and also provides methods of dealing with activities related to the familiar group. These features support interacting in the virtual world.
- So far, we have described the First component of the theoretical model (Figure 1) consisting of components as suggested by (the University of Nebraska at Omaha et al., 2009), this includes the metaverse itself, avatars, and metaverse technology capabilities. The next component comprises The Balance Scorecard.

4.4 The Balance Scorecard- The strategic performance of the application of Metaverse can have an impact on the four perspectives as suggested by Norton and Kaplan to manage and implement strategy and to measure the financial and non-financial aspects. (Kaplan & Norton, 1992)

- **Financial Perspective** –The metaverse application could make an impact on the operating income, profitability, and return on investment of the organization. The financial investment in various types of head glasses, smart glasses, and lenses is utilized to interface with the metaverse platform. A vast majority of big techno giants, companies, start-ups, and established brands have already invested a whooping $120 billion almost double the $57 million in 2021. The implementation of Metaverse in an agile environment will require immense complexity and collaboration between all stakeholders.
- **Customer Perspective** - This perspective in the Balance Scorecard monitors the process of delivering value to its clients and assesses the customer. As a part of the company's strategic success, an organization needs to understand customer needs and satisfaction. The metaverse can create virtual versions of existing products and services in more immersive ways. The future norm is going to be metaverse by putting their customers first to enhance their buying experience uniquely from anywhere. Capitalizing on the new avenues of Metaverse brands like Tanishq, Ceat, M&M and Asian Paints is already the end route toward building a virtual world using videos, images, and 3D products.
- **Internal Process Perspective** -The business operations have the greatest influence on customer satisfaction which could be the source of the internal metrics for the balanced scorecard. To exercise effective market leadership, examine the company's goods or services and become familiar with its fundamental capabilities. High-quality products, operational excellence, and improving the marketing process using avatars, wearables, objects, architecture, and interiors are possible objectives from an internal process perspective.
- **Learning and Growth Perspective** - It is challenging to imagine how the metaverse would affect learning and growth. a virtual space that may serve as a knowledge repository and provide fully immersive learning opportunities for L&D teams to develop

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and connect. The future holds bright in terms of L&D as it would hire, train and develop a more engaging workforce. According to the latest survey by PWC, 51% of companies have already imitated the process of integrating VR into their corporate strategy, or they have already built around one dedicated segment of business into VR. Findings reveal a significant future for the metaverse: Virtual learners were 4 times faster to learn than in classroom training, more confident to apply skills learned after training 277 more times, 3.76 more connected to content delivered in training, and 4 times more focussed than their e-learning colleagues. The real measurement of ROI would be in terms of training and development whether the training imparted in the metaverse was successful or not.

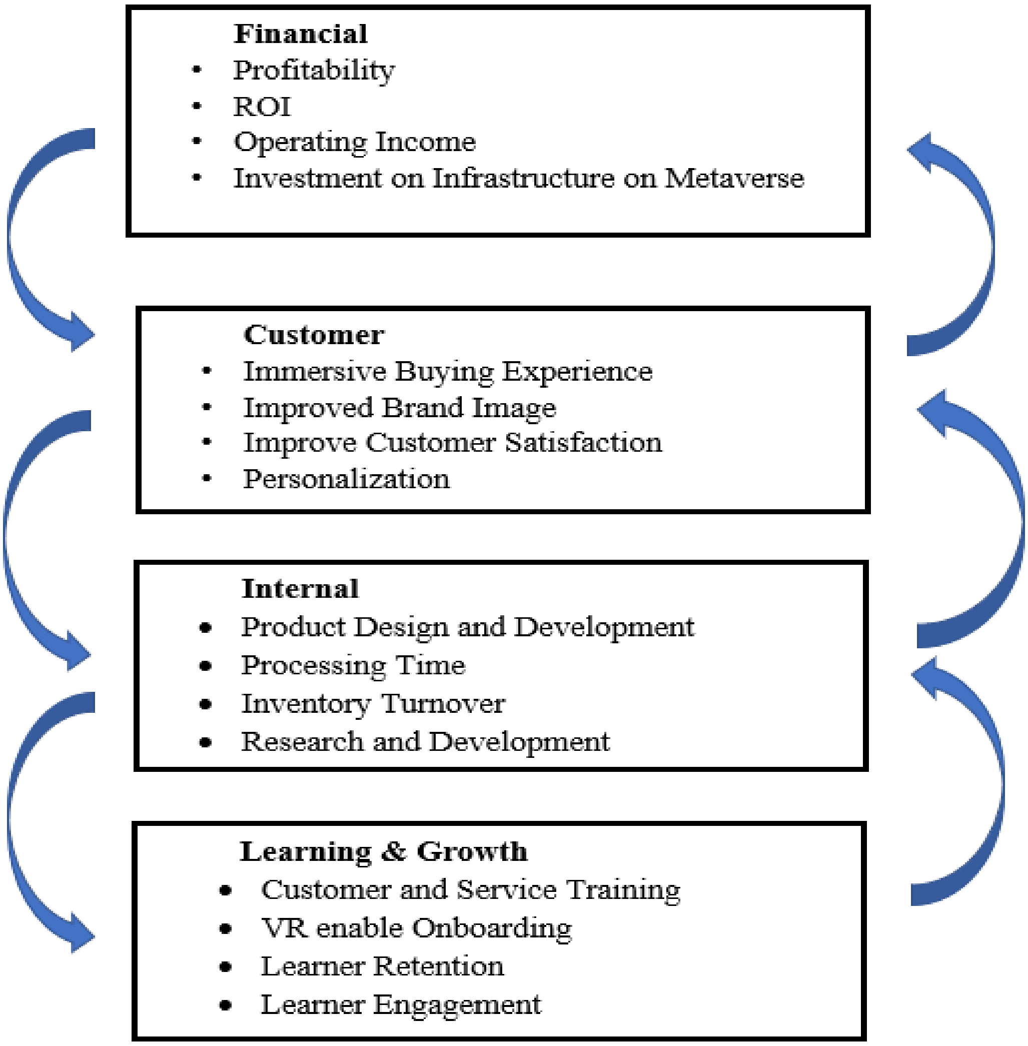

Figure 4. Interpretation of measuring metaverse on perspectives of balanced scorecard

4.5 Organizational Agility

The Third component which makes an overall impact in terms of organizational agility taken from (Saha et al., 2017) describes their Thematic Model of Exploring Organizational Agility on the three elements of Organizational Agility as responsiveness, Flexibility, and innovativeness.

- **Responsiveness- (**Saha et al., 2017) defines responsiveness as enhancing organizational learning through agility in terms of bolstering the managerial skills of an organization. Agility is responsiveness in changing the transformations; it would be much easier to accept this component of agility if Constant attention to technical excellence is given then it will improve agility(Gren & Lenberg, 2020). Strategic HR practices need to be

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responsive to the ever-changing needs of such an organization. The application of Metaverse is one such aspect of responsiveness towards the organization. The metaverse can sense, react and measure the user's needs through experiences. The organizations need to be responsive to the aspects of the Balance Scorecard.

- **Flexibility**-(Saha et al., 2017) defines flexibility as the capability to respond to variations in the environment. Strategic flexibility is a crucial aspect for examining the impact of HRM practices and developing and nurturing dynamic core competencies organizations focus on flexibility to achieve competitive advantages in a dynamic environment. Metaverse and the four perspectives of Metaverse need to be flexible in their approach to achieve this dimension in Organizational agility. The infinite world of Metaverse will enhance collaboration through its essential feature of being in unlimited space and flexibility as remote working with an immersive learning experience through visual and hands-on learning experiences from anywhere.
- **Innovativeness-** (Saha et al., 2017) defines Innovativeness as the ability of an organization with innumerable potentials and groundbreaking ideas an organization has the capability to move forward distinctively by harnessing its talent in the most efficient way. According to the (*Innovative and Practical Applications of the Metaverse | McKinsey*, n.d.) its states that the rate of innovation is going at a very fast speed and many companies are embedding their training modules to deliver innovative experiences to consumers to stimulate effective engagement of consumers in the metaverse which is possible with enhancing learning and development innovative HR practices like in metaverse which has immense capabilities to revolutionize our workplaces like Meta's Horizon Workrooms and Microsoft's Mesh regardless of the physical location teams can work virtually closing the gap between the physical world and virtual world.

5.2 Future Implications

Developments in VR and AR technology have encouraged interest in implementing them in the organization. This technology will be beneficial in improving the performance of many areas in an organization like: financial, internal, HRM, etc. this technology will remove the barrier and will be beneficial to the employees living geographically scattered and working together at a common platform. This technology creates a real and imaginary world and allows real-time interactions. This technology will also prove helpful for small businesses to increase their productivity.

5.3 Limitation and directions to future research

Although the study contributes to the impact of Metaverse on strategic HRM it would be worthwhile to know the limitations of the study. Firstly, the research is based on theoretical literature and based on the author's interpretation of the metaverse on strategic HRM. Secondly, the study concentrates on the impact of the Metaverse and how it can be measured on the four perspectives of the Balance Scorecard. Thirdly, the application of Metaverse is still in the infancy stage, organizations need to carefully plan the applications of Metaverse owing to the huge costs, issues of data protection, and adopting the tools in the metaverse. Fourthly due to the limitations of time the study is limited to the theoretical application of the metaverse. Thus, future research can significantly focus on more exploration of the applications of Metaverse in terms of Employee engagement, Onboarding employee experiences, Learning, and development along with the major challenges with the use of Metaverse and its impact on issues like mental health and awareness data privacy, technological and financial support challenges.

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5.1 Discussion and Conclusions

The volume of research and the number of applications connected to the usage of the metaverse in different sectors is expected to grow significantly over the next ten years due to the rapid growth of associated technologies, such as wearable technology, high-speed computers and networks, and sensor-based technology. Balance Score Card aspects will help organizations identify, measure, and improve their internal process to reap the benefits of a metaverse in an agile environment. In a rapid and constantly changing fragmented global market environment, strategic HR has the capability to discover those facets of the organization where we need to renew or rediscover the new innovations coming up in the global scenario like Metaverse which can altogether shape our future work and give a new definition of the hybrid workforce.

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A Study of Employee Engagement Practices and its Impact on Team Effectiveness in the Context of Virtual and Collaborative Workplace

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Abstract

Purpose: To identify the challenges faced by virtual teams and study the impact of employee engagement practices on performance, team effectiveness of Virtual workforce / Virtual teams.

Research Problem: With the Gig Economy coming in and the worldwide disruption in the operation of many organisations due to Geopolitical or biological factors, organisations should be well prepared to continue to give an uninterrupted performance. Under such circumstances, managing the virtual workforce becomes very important. Due to Technological advances, people all across the globe are being able to collaborate without travelling, but as a result, the way organisations operate changes and requires the development of a new set of competencies from both managers and employees (Mihhailova, 2008). Therefore, in order to ensure the smooth running of an organisation, it is imperative to have a concrete performance management system in place as far as the virtual workforce is concerned. Execution of virtual work calls for extensive scientific research because managing a virtual team is a lot different from managing an ordinary team.

Research Methodology: Stratified sampling method has been used as the mode of data collection for the purpose of this research which has been done by floating a set of questionnaires among the sample set of respondents. Stratified sampling would help in classifying the sample set into different strata as required and optimise the sample size accordingly to have better precision. In this case, the sample has been categorised primarily into two strata of Gender (Male and Female). The responses have been then analysed through SPSS by Factor analysis to reach the objective from a grass root level. In this case, the respondents were selected from only those organisations where the nature of work is such that work-from-home is a viable option. Then the respondents were selected and segregated on the basis of gender so as to ensure a diverse sample set. Once the data has been run through factor analysis and the independent variables have been identified, linear regression analysis has then been performed on the data in order to understand the relationship between the deduced independent variables and team effectiveness. Finally, on the basis of the literature review and the responses received through the questionnaire, this piece of research will analyse the inputs and recommend suitable practices for leading virtual teams, taking the challenges faced by the virtual teams into consideration.

Expected Outcome / Findings: Through this research, it is expected to come to a conclusion about the challenges that virtual teams face and the factors that affect their performance of the virtual teams. It is then required to map the challenges with the associated factors influencing performance in order to recommend viable, practical, and virtually implementable employee engagement practices.

Practical / Managerial Implications: The study shall help virtual team managers better identify the needs of the employees which would lead to better employee engagement and in turn improve productivity. It would help the Human Resource specialists to pay specific attention to certain areas of employee engagement and motivational factors while introducing a virtual work ecosystem in order to optimise the performance of the workforce.
Originality / Value: The originality of the paper comes from its methodological approach to identify the factors or the clusters of factors that impact the performance of virtual teams and the in-depth analysis of the factors in order to incorporate the same while designing employee engagement practices in an organisation for its virtual workforce.

Keywords: Virtual Workplace, Employee Engagement, Team Effectiveness

1. Introduction

With an increasing rate of globalisation in the business landscape and ever-advancing communication technologies, the ways organisations function have changed. At times of uncertainty in the market, business continuity planning becomes a critical aspect of facing global business challenges. Also with the advent of the gig economy, the nitty-gritty of workforce planning has significantly drifted to a virtual paradigm. A virtual workforce with people dispersed geographically across borders is connected through technology to operate on business projects. Such a concept of operation has led organisations in business continuity planning at averse and uncertain times, reducing travel expenses for personnel and adapting to the gig economy (Berry, 2011). While it is imperative to keep the employees of an organisation engaged so as to improve performance, the dynamics of the same drift significantly from the ordinary work edifice in the case of a virtual work edifice (Stacie Furst, 1999). With more and more people preferring to work from home in view of improved work-life balance, telecommuting has become indispensable to firms. Team leaders or managers need to come up with virtually implementable employee engagement practices which will be effective enough to enhance team effectiveness (Broadfoot, 2001). With many organisations resorting to working from home or Flexi-working arrangements for the employees, the challenge lies with the HR to ensure the availability of the relevant tools and technology in place so as to create a viable virtual work ecosystem for the employees. Irrespective of the effectiveness of the employee engagement activity in a virtual work ecosystem, a poor communication system or technological issue with connectivity may irk the employees and make them feel disengaged from the work. Such a shift in the business regime from a work-from-office to a work-from-home setup as a result of market uncertainties and other changes in the business landscape has exposed people of the organisations to a different learning environment. As far as training and development is concerned, with the employees working from home, the HR has to monitor the training needs of the employees as well because the entire mode of work has become digital. Employees with lesser digital dexterity might find it difficult to figure out the ongoing way of working. It is the role of HR to identify the deficiencies in the teams with regular communication with several line managers and address the same with a solution that is virtually implementable. For example, TCS has been offering its employees free access to online Udemy courses thereby helping them up-skilling themselves. The first and foremost way of engaging an employee effectively in the work is to ensure a technologically advanced and robust infrastructure to support the virtual work setup. Virtual team members being geographically isolated in terms of time zones and cultures are comparatively more difficult to manage. Moreover, such a workforce should be led and not managed in order to ensure optimal operation of the same. Leadership in the context of a virtual workplace is pivotal to the engagement of virtual workers. Leadership comes with empathy and a clear vision for the team (Farheen Fathima Shaik, 2019). In order to result in

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the effective working of the team, team leaders and managers should work on uniform distribution of doable jobs in a particular time frame so that overworking does not become an issue for the employees which might further lead to stress. Another important aspect of good leadership is to avoid micromanaging the team members and mutually discuss with the teammates and set daily goals to be achieved in a day (Spreitzer, 2008). Even in a virtual work setup, it is essential to clearly define the goals to be achieved and guide the team members in achieving the same. The team leaders should keep themselves readily available to the team so that they can be easily reached out to their fellow teammates when needed.

With the recent COVID-19 outbreak creating havoc all across the globe, worldwide businesses have been going through turmoil to sustain themselves in the market. As people are the lifeline of an organisation, while their health and safety are at stake, the challenge of workforce management has taken a gargantuan shape thereby creating pressure on the Human Resource department of the organisation to cope with the situation. The pandemic situation has however led to a forced demonstration to the business leaders of a massive work-from-home or Flexi-work experiment which HR leaders have been pushing for quite a long time with the advent of the gig economy and millennial workforce (Celia T. Romm, 1998). But the adversity in workforce management brought out by the current situation has anyway challenged HR professionals in an unprecedented manner. The significance of the role of HR has become more prominent in the midst of the ongoing situation because under such a tough time the organisations appear to depend heavily on HR to come up with an implementable business continuity plan. Amid worldwide lockdown in several countries, the business will continue only when the employees continue to work. But with boiling employee safety issues in the pandemic situation, it becomes pretty difficult to keep that going. It is the HR that has to come up with alternative options with the required necessary arrangements in place to ensure the continued operation of the business. Organisations such as Infosys, Paytm, TCS, etc have completely shifted to a work-from-home model to continue their operation while keeping in mind the safety of their employees.

The prompt response to such an extreme situation is what the HR professionals have to deliver for the organisations now.

Employee Engagement is the ability to involve an employee/worker in organisational activities so as to instil a sense of belonging to the organisation (Bhatnagar, 2010). It makes an employee bring his/her cognitive as well as behavioural aspects to the performance, which in turn leads to better involvement and better quality of output. Lack of physical interaction in a virtual work setup prevents team members from building relationships and good rapport with each other (Grantham, 1996). This forms the cornerstone of a successful virtual team. Many organisations across the world such as HP, Lenovo, TCS, Cisco, etc have resorted to the use of technology with tools like Zoom, Google Hangout, MS Teams, etc to collaborate virtually for meetings and ensure optimum employee engagement. With the entire workplace going virtual amid the recent pandemic of COVID-19, performance management again comes out as another tough job to do. The HR of an organisation needs to review its performance management system so as to make sure it doesn't get disrupted if a similar situation creeps in further. Performance Management is a very efficient way of keeping employees motivated if the review system is formulated through manager-subordinate mutual discussion (Bhatnagar, 2010). With the skyrocketed level of uncertainty in the present scenario, it is imperative to revisit and review the HR policies of the organisations and revise the same accordingly so that they serve a long-term purpose even at times of future market fluctuations and uncertainties.

Employee Engagement also plays an important role as a retention strategy in order to make the employees feel like a part of the organisational family and also a way to transcend the organisational values and philosophies to the individual employees so as to enable them to

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have an organisational perspective towards doing the job (Kevin Ruck, 2012). Working from home or a remote location changes the dynamics of employee engagement in the virtual context and therefore the ways to keep the employees engaged also change due to the lack of peer-to-peer interaction and learning (Berry, 2011). It may so happen that not all the members of a virtual team know each other. In such a case, engagement activities need to be designed accordingly that would boost their interaction through productive and engaging communication and help in building cordial relationships with colleagues. A virtual engagement activity needs to be such that it would enhance interaction among employees and help in knowing each other in a team (Fredrick M. Nafukho, C., 2011). In order to assess the level of engagement among the virtual employees, it is wiser to utilise technology to its full capacity which would make it more reliable and henceforth appropriate measures can be taken to address the same through virtually implementable ways. As the traditional ways of performing HR jobs are being challenged by the disruptive and volatile market in the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world, HR analytics stands out to be the saviour to fast-track the HR jobs and simplify the role of the HR professionals in a manner that would ensure improved efficiency and reliability of the system. With the incessant increase in the penetration of the internet and smartphones across the public domain, an exorbitant quantum of data is being generated on the web. HR Analytics does not only make use of the internal data generated but also the external data available to carry out a gamut of HR activities that in turn aids the decision-making process of an organisation. Data generated or collected can be both quantitative or qualitative in nature which is fed into the appropriate analytical tool to decipher any significant information or pattern it. HR Analytics is now extensively used by organisations to evaluate and manage the performance of its employees so as to align the tasks of individual employees with the business goals. Human Resource Management (HRM) is now being called Strategic Human Resource Management (SHRM) which deals with designing people strategies in an organisation by data analysis. Traditional Performance management strategies were inefficient to evaluate the performance of an employee which would subsequently lead to higher attrition and higher employee turnover rate. In order to ensure a fair performance appraisal and performance management system, Data Analytics has a significant role to play in this context. Accurate Data Mining can be used to predict employee expectations, which will finally help HR professionals to design appropriate ways to address the issues. People are the lifeline of an organisation and hence the onus of organisational success lies majorly on its people management (Sjoerd van den Heuvel, 2017). To ensure better productivity in the organisation, the performance of every individual in an organisation needs to be analysed and acted upon accordingly. Timely resolution of employee grievances also seems to be an effective way to keep an employee emotionally engaged in the organisation (Berry, 2011). While it is extremely important to keep the employees (virtual or ordinary) emotionally and behaviourally engaged to the work, it is also significant to make them feel engaged enough with the organisation in terms of its values and principles.

The more the team effectiveness, the more efficiency of the team members. A good level of team effectiveness fosters innovation and the generation of ideas across the team. It is more likely for an emotionally and professionally engaged person to come up with innovative ways of operation which would ultimately be beneficial to the organisation at large.

Maslow's Hierarchy of Needs can be applied to employee engagement in order to understand the nuances of employee engagement from a grass root level. The figure below shows Maslow's Needs Hierarchy:

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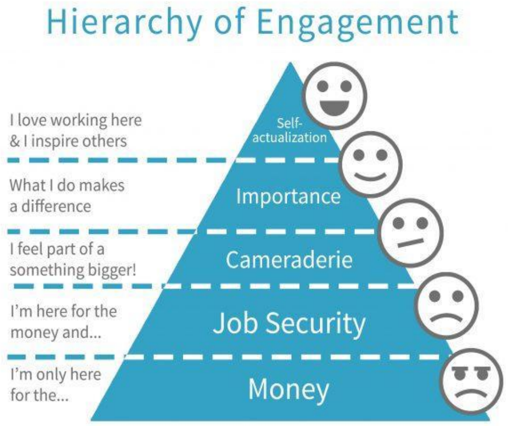
While the most basic needs of survival at the bottom of Maslow's pyramid from an organisational or workplace perspective depend on both internal and external factors, they may not be considered as far as designing employee engagement practices is concerned. However, the factors which significantly engage an employee to work from the top three human needs in the hierarchy as shown in the figure above. The demonstration of the level of employee engagement as per Maslow's Needs Hierarchy is shown below:



Employee Engagement practices at an organisation need to be designed by focusing on the top three human needs in the pyramid of Maslow's Needs Hierarchy. Better the Employee Engagement, the better will be the productivity of the organisation as the people of an organisation are the major stakeholders of the organisational output.

2. Literature Review

With the advent and advancement of Information Technology, people have been able to access their data anytime, anywhere, and everywhere. Such flexibility in the accessibility of information at any given instant has enabled managers and employees to stay connected virtually and enhance the rate of productivity. However, with teams working virtually, there has always been an exploration going on in the organisations so as to ensure a concrete way of optimum collaboration among the employees. This chapter is going to discuss an overview of the challenges that virtual teams face and the factors that influence their effectiveness.

Effective knowledge sharing across virtual teams has turned out to be one of the factors that influence performance and hence the organisational output. (Bhatnagar, 2010) With a global virtual workforce and employees from diverse cultural backgrounds considering both intrinsic and extrinsic motivation factors, it is necessary to have a regime of efficient knowledge sharing among employees so that they can operate in a seamless manner (Cascio, 2000). With the increasingly dynamic global economy and also with the increase in

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outsourcing, the requirement for effective knowledge sharing across geographical boundaries is abundantly imperative (Liu, 2016). Knowledge sharing in global virtual teams is implicitly dependent on two main components in group dynamics: Motivation and Team environment (Liu, 2016). According to the study conducted by Liu in 2016 in his journal, knowledge sharing across globally dispersed virtual teams is quite influenced by team environment factors like trust and affiliation and motivation factors like perceived reciprocal benefits. All these factors influence the attitude of an individual to knowledge sharing and other control variables include nationality, computer expertise, age, and gender which have an impact on the knowledge-sharing behaviour.

The research journal (Manz, 2007) addresses virtual team collaboration from a “back door” perspective by realising the conditions that require to be present for the same to effectively occur. It is quite natural that when teams are working virtually at several physical locations, collaboration is the only way to take the work forward. (Mitchell, 2015) In order to collaborate effectively, there should be a support system to enable it, which is quite naturally Technology at large. (Illegems, Viviane, Verbeke, Alain, 2003) Technology has enabled the virtual workforce to collaborate effectively and efficiently through various virtual platforms. Virtual teams have been able to connect people across disciplines and functions despite being geographically dispersed aided by advanced communication technologies (Manz, 2007). According to the study, there are mainly three important factors that impact the Degree of Virtual Collaboration as Quality of Relationship, Trust, and Shared Understanding.

In a highly competitive market, virtual teams have become indispensable for organizations to continue operations in a cost-effective manner. Two of the main challenges associated with a virtual workforce are confusion among the team members and the isolation that they experience. (Mihhailova, 2008) In order to maintain an engaging workforce, proper communication channels need to be ensured across the team, failing which may lead to consequences like communication gaps, trust issues, and inability to establish a level field for the optimal functioning of the team. Despite the complications of geographical isolation, the tasks performed by virtual teams are interdependent with each other (Mitchell, 2015). Any gap in communication or missing information going unnoticed may have a ripple effect on a series of jobs associated with a project. An imperative challenge for virtual team building is the need for trust and identity. Trust and understanding are the essential components of the existence of virtual teams as they operate from different locations, for which they have to rely on each other to optimally function. Trust is a hinge to handling anxiety and uncertain features of virtual teams (Mitchell, 2015).

Technology has enabled employees working virtually at different physical locations to collaborate effectively by effective means of organisational communication among employees. (Ali D. Akkirman, 2005) Communication is very important as far as teamwork is concerned and when it comes to the virtual workforce, the strategy of effective communication changes as it becomes tech-enabled. Ineffective communication among employees leads to lower job satisfaction and poor trust among team members while experiencing higher levels of job stress (Jungsun (Sunny) Kim, The impact of using a virtual employee engagement platform (VEEP) on employee engagement and intention to stay, 2017). A study by (Harris, 2004) 2004 showed that there are six different organisational communication factors such as - relationship with team lead, communication environment, overall communication satisfaction, horizontal communication, organisational integration, and personal feedback on which virtual workers have higher levels of job satisfaction (Harris, 2004). Innovation occurs in a social setting and there are certain qualities imposed by Computer-mediated processes on the social interaction and group functioning of teams handling innovation projects (Gressgård, 2011).

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With the advent of Internet Technology, there has been a paradigm shift in the landscape of learning and development as far as the virtual workforce is concerned. E-learning has become a facilitator of self-learning practices among the employees and such facilities have turned out to be a sort of motivator for the employees (SUMITA RAGHURAM, 2017). Employees have been able to upskill themselves when required with the help of virtual training programs, which have helped organisations in achieving better employee engagement. However, with increased demand for learning new skills and competencies, reduced travel expenses, and ongoing uncertain market conditions, organisations are now compelled to look for virtual learning solutions. Virtual offices are supported by virtual learning technologies, which provide new avenues for the development of human capital (Fredrick M. Nafukho C. M., 2015). The success of future organisations will be their capability to make use of their human capital in the virtual workplace to learn, generate and manage new knowledge in both traditional and virtual work environments (Fredrick M. Nafukho C. M., 2015).

Virtual teams are geographically or administratively distributed groups of people that are connected by telecommunication and information technologies (Sundin, 2010). This paradigm of virtual operation of an organisation has its own set of collaborative challenges among its employees given the fact that it is supported by dispersion, diversity, and technology. (Allcome, 1997) The challenges that Virtual teams generally face are Lack of Trust, Lack of physical interaction, Loss of Team spirit, Cultural conflicts, and technical glitches leading to poor communication (Berry, 2011).

Physical interaction and face-to-face communication help in developing a conducive working relationship that aids the productivity of the employees. As a result, it becomes difficult to develop trust among the members of a virtual team which acts as a deterrent to effective team dynamics (Harris, 2004). A virtual workforce dispersed all across the globe involves people from various cultural backgrounds. While diversity aids innovation in a team, it also brings in the challenge of cultural conflict among the employees (Christian Heath, 1995). Employees working remotely face technological challenges at times due to various reasons like poor internet connectivity or technical glitch in the software used, which creates a communication gap in the team (SUMITA RAGHURAM, 2017). Ineffective communication is again another challenge that virtual employees face because of technical issues. The challenge of uneven participation and Lack of Accountability are two more challenges that (Tarila Zuofa, 2017) identified in his study.

Leadership has been considered one of the most significant enablers of employee engagement in the context of both virtual and non-virtual workplaces. However, the ways of executing effective leadership change in the virtual context. (Marie Carasco-Saul, 2015) in the study of the relationship between leadership and employee engagement referred to the two types of leader behaviour that go hand in hand viz: task-oriented and relationship-oriented behaviour. The study drew the interdependence between leadership and employee engagement and demonstrated a significant correlation between the same that helped to understand the concept that the quality of a relationship between a leader and the employees is predictive of the outcomes at individual and organisational levels (Marie Carasco-Saul, 2015). The study showed that when leaders demonstrate emotional support and recognition of employees' contributions, they feel more secure and attached to the project they are working on. (Marie Carasco-Saul, 2015) There are various forms of leadership such as Transformational Leadership, Charismatic Leadership, Ethical Leadership, and Authentic Leadership that work differently under different situations. It is essential for a leader to build an engaging climate across the team as it would help in developing self-awareness among the team members (Marie Carasco-Saul, 2015). Self-awareness is the conceptual cornerstone of emotional intelligence. Leaders demonstrating the will to respond have been proven to have better engagement in their teams.

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When employees are productively engaged they demonstrate their cognitive, emotional, and behavioural aspects toward their performance. (Farheen Fathima Shaik, 2019) articulated the inter-relationship between the drivers of virtual employee engagement and team performance. The study showed the following drivers of employee engagement in the virtual context: focus on goal clarity, coordination issues, cultural diversity, trust and maturity, technology medium, interpersonal relationships, informal communication, and temporal distance. Employee Engagement also depends on the quality of the symbiotic relationship between the employees and the organisation (Sarah Jenkins, 2013). An employee seems to be more engaged with a decent work/life balance and therefore, a mere transformation to the virtual edifice of work would not suffice in achieving productive engagement of employees until the job allocation of employees is not meticulously crafted so as to let them have a good work/life balance.

3. Research Methodology

Stratified sampling method has been used as the mode of data collection for the purpose of this research which has been done by floating a set of questionnaires among the sample set of respondents. Stratified sampling would help in classifying the sample set into different strata as required and optimise the sample size accordingly to have better precision. In this case, the sample has been categorised primarily into two strata of Gender (Male and Female). The responses have been then analysed through SPSS by Factor analysis to reach the objective from a grass root level. In this case, the respondents were selected from only those organisations where the nature of work is such that work-from-home is a viable option. Then the respondents were selected and segregated on the basis of gender so as to ensure a diverse sample set. Once the data has been run through factor analysis and the independent variables have been identified, linear regression analysis has then been performed on the data in order to understand the relationship between the deduced independent variables and team effectiveness. As far as the research methodology is concerned, the questionnaire to understand the virtual employee engagement practices and the factors that need to be addressed while designing an engagement activity that would result in improved virtual team effectiveness had been floated across 104 respondents (68 Males, 36 Females) from various sectors like IT, FMCG, Manufacturing, Retail, BFSI, E-Commerce, etc. The responses received from the respondents were then put into exploratory research to figure out and understand the independent factors of employee motivation and engagement in the context of a virtual workplace. A Factor Analysis is conducted on the available data as received from the respondents on SPSS for Dimension Reduction.

Once the three components had been identified, the quantified average of the responses for each group of statements that indicates one component/variable was considered in order to understand the impact of those independent variables on the team effectiveness/productivity, the response for which had been collected through the same questionnaire.

In order to measure the dependence of Team Effectiveness on the deduced independent variables, a multi-linear regression analysis was performed on the data.

Finally, on the basis of the literature review and the responses received through the questionnaire, this piece of research has been able to analyse the inputs and recommend suitable practices for leading virtual teams, taking the challenges faced by the virtual teams into consideration.

4. Results and Analysis

As far as the research methodology is concerned, the questionnaire to understand the virtual employee engagement practices and the factors that need to be addressed while designing an engagement activity that would result in improved virtual team effectiveness, had been

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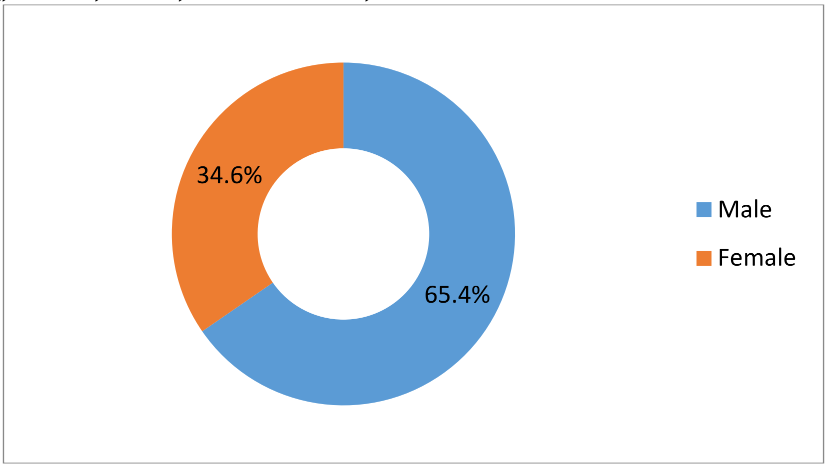
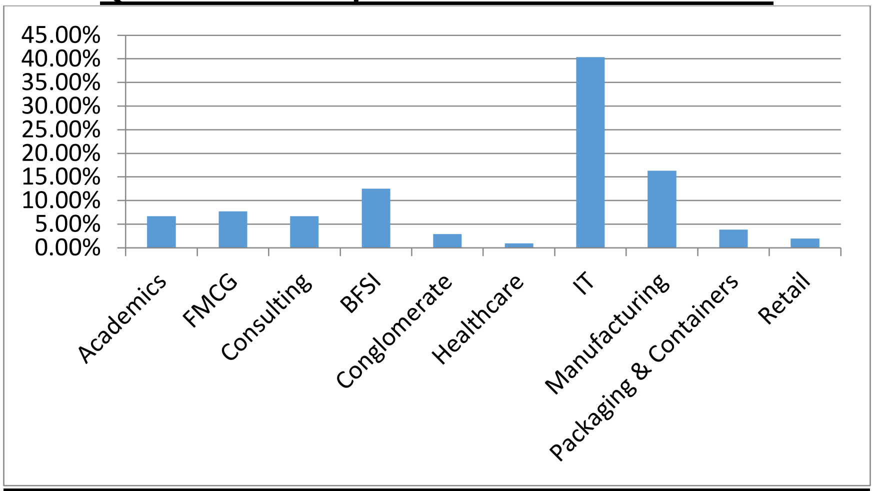
floated across 104 respondents (68 Males, 36 Females) from various sectors like IT, FMCG, Manufacturing, Retail, BFSI, E-Commerce, etc.

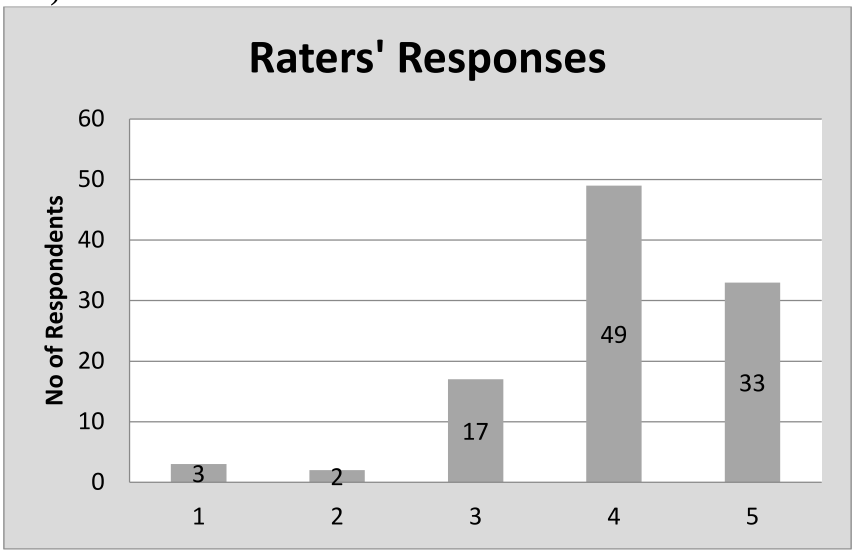


Questionnaire Respondents' Gender Distribution



Questionnaire Respondents' Working sector

The questionnaire had been designed to decipher the information on the independent factors that help an employee working from home to be productive and efficient. Feedback on individual virtual engagement practices at various organizations and on several aspects of the source of motivation and enthusiasm of a virtual employee had been recorded on a likert scale of 1 to 5 (1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree", 5 = "Strongly Agree").



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Distribution of responses on the impact of Virtual Employee Engagement practices on Team Effectiveness and Productivity

In the above figure, the X-axis represents the rating of Agreeableness among respondents to the impact of their virtual engagement activities/practices on their work effectiveness, where, 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree", 5 = "Strongly Agree".
Out of 104 respondents, almost 79% of the people agree that their virtual engagement activities/practices do have an influence on their effectiveness and efficiency.
A Factor Analysis is conducted on the available data as received from the respondents on SPSS for Dimension Reduction in order to figure out and understand the independent factors of employee motivation and engagement in the context of a virtual workplace.
Before conducting the Factor Analysis, a Cronbach Alpha's Reliability test had been conducted to measure the reliability and internal consistency of the data recorded for the research. The test result for the Reliability Statistics is as shown below:
Chronbach's Alpha = 0.909
Chronbach's Alpha based on standardised items = 0.910

Cronbach's alpha	Internal consistency
α ≥ 0.9	Excellent
0.9 > α ≥ 0.8	Good
0.8 > α ≥ 0.7	Acceptable
0.7 > α ≥ 0.6	Questionable
0.6 > α ≥ 0.5	Poor
0.5 > α	Unacceptable

The above result of 0.909 (> 0.70) or 90.9% reliability is quite decent to show that the data collected has high reliability and internal consistency. The high reliability of the data shows that the data recorded would measure what it should.

KMO and Bartlett's Test:
KMO Measure of Sampling Adequacy measures the adequacy and sufficiency of the data recorded for analysis. High values (>0.50) indicate that sampling is adequate.
Small values (<0.05) of the Significance level as per Bartlett's test show that the data is statistically significant and the factor analysis would be appropriate with the data.

KMO and Bartlett's Test		
KMO Measure of Sampling Adequacy		**0.879**
Bartlett's Test of Sphericity	Chi-Square	**785.131**
	df	**91**
	Sig.	**0.000**

The above result for KMO and Bartlett's Test shows a sufficiently high value of Sampling Adequacy and a significance level of .000 (<0.05), which is small enough to indicate that the data recorded is statistically significant for the research.

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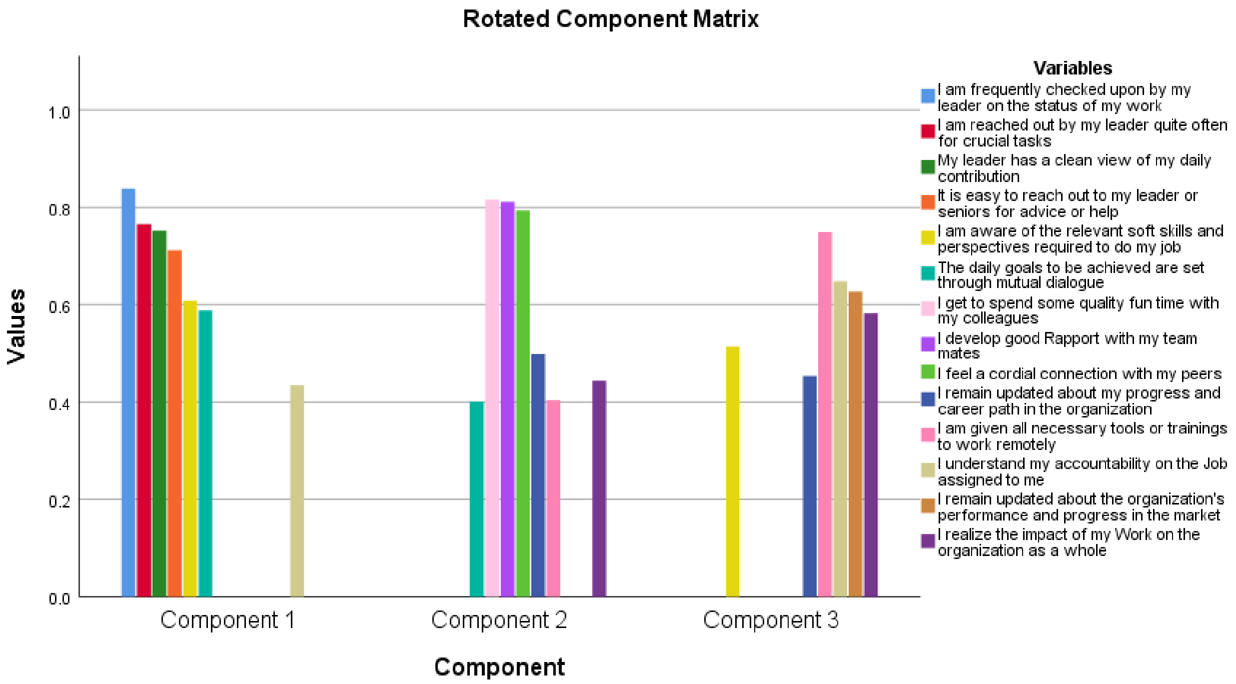
Factor Analysis

As the data were run through Factor Analysis, the 14 variables were reduced to 3 independent variables that would be helpful and needed to be considered in order to design a virtual engagement activity for the employees working from home or a remote location. With factor loadings greater than 0.4, the 14 variables were grouped into 3 major independent components, which if considered in the design of Virtual Employee Engagement activity may result in better virtual team effectiveness and productivity.



As per the result of the Factor Analysis, the 3 major independent variables are mentioned below:

1. Leadership
2. Relationship and Communication
3. Knowledge Sharing

Regression Analysis

Once the three components had been identified, the quantified average of the responses for each group of statements that indicates one component/variable was considered in order to understand the impact of those independent variables on the team effectiveness/productivity, the response for which had been collected through the same questionnaire. The respondents were asked to rate on a likert scale of 1-5 (1 = “Very Low”, 2 = “Low”, 3 = “Neutral”, 4 = “High”, 5 = “Very High”) for the impact of their virtual employee engagement practices on their team/individual productivity.

In order to measure the dependence of Team Effectiveness on the deduced independent variables – Leadership, Relationship & Communication, and Knowledge Sharing, a linear regression analysis was performed on the data.

The result shown by the analysis is as stated below:

R	R	Adjusted	Std. Error	Change Statistics

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	Square	R Square	of the Estimate	R Square Change	F Change	Sig. F Change
.883	**0.779**	**0.773**	**0.350**	**0.779**	**117.732**	**0.000**

According to the model summary,

- $p<0.05$ means that the independent variables are statistically significant to be included in the model for predicting the dependence of the dependent variable on the independent variables.
- More than 77% of the variance in the dependent variable (Team Effectiveness) is explained by the independent variables.

The linear equation demonstrating the relationship between Leadership (A), Relationship & Communication (B), Knowledge Sharing (C), and Team Effectiveness (Y) is as follows:

$$\mathbf{Y = 0.384A + 0.228B + 0.277C + 0.339}$$

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Graphical Representation:

The above graphical representation demonstrates the linear and direct relationship between the stated dependent and independent variables.

Discussions

The pandemic situation of Covid-19 has confined people into their own spaces of four walls thereby making work-from-home the only viable mode of work for business continuity considering the health and safety of the employees. Under such unavoidable circumstances where social distancing is the new normal, people-to-people interaction has come to a halt. The pandemic situation has not only taken a direct toll on people's physical health but has also unleashed adverse effects indirectly on their mental health. The four-walled confinement of the people for almost the entire day regularly has been enhancing the frustration level of the people. Then they have to work with such a state of mind keeping themselves engaged with the work. Such a situation definitely calls for effective Employee Engagement practices in the virtual context more than ever. An understanding of the factors influencing employee engagement and collaboration in the virtual context is essential so as to streamline the designing of the practices according to the needs of the employees. The three deduced variables affecting virtual team effectiveness are going to be useful in coming up with virtual engagement practices that specifically address those aspects of employee needs and wants. Thus, the findings of this research paper are going to be helpful in the post-COVID era of businesses if new ideas of application of the same can be generated.

Effective leadership activities and line managers with leadership qualities stand out to be very influential in keeping virtual employees engaged and productive. Proper guidance and the right mentoring of the employees working from home by the team leaders would help in reducing stress and enhance the productivity of the team. More than 70% of the respondents feel overworking is an issue and a source of stress in a work-from-home setup. Working for more than 11 hours in a day turns out to be a source of stress, which irks the employees thereby leading to disengagement. Uniform distribution of work and mutual setting up of daily goals are some of the aspects the team leader should look up to in order to improve team effectiveness. Engagement practices need to be framed so as to enable the employees to achieve their daily goals while enjoying the work that they do.

Working from home or a remote location changes the dynamics of employee engagement in the virtual context and therefore the ways to keep the employees engaged also change due to

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the lack of peer-to-peer interaction and learning. It may so happen that not all the members of a virtual team know each other. In such a case, engagement activities need to be designed accordingly that would boost their interaction through productive and engaging communication and help in building cordial relationships with colleagues. From the responses received from the questionnaire, ~60% of the respondents feel that lack of face-to-face interaction leads to trust issues and team conflicts in the context of a virtual workplace. A virtual engagement activity needs to be so designed that would enhance interaction among employees and help them in knowing each other in a team.

While being in a virtual work ecosystem, accessibility to organisational information (company accolades, accomplishments, position, industry status, etc) remains restricted to many employees. A holistic view of one’s work and the knowledge of its impact on the organisation as a whole seems to engage an employee significantly in the work and helps in understanding his/her accountability well. Almost 55% of the total respondents feel that virtual team conflicts arise from poor facilities and infrastructure of knowledge sharing among peers and colleagues.

Recommendations

The paper encourages organisations to employ employee engagement practices in the organisations rather than employee engagement activities. The engagement practices of the organisations need to be designed considering the three independent variables – Leadership, Relationship and Communication, and Knowledge sharing. The engagement practices should be such that Leadership, Communication, and Knowledge sharing become the norm of the organisation instead of having a mere reflection of the same in some activities conducted for a few minutes or hours.

As far as Leadership is concerned, team leaders and line managers should lead the team instead of managing the team. Out of the total responses received on the challenges faced in a virtual work ecosystem, more than 50% of the respondents consider Overworking (more than 11 hours a day) as an issue associated with it, which leads to work fatigue and stress. Leadership comes with empathy and a clear vision for the team. In order to result in the effective working of the team, team leaders and managers should work on uniform distribution of doable jobs in a particular time frame, avoid micromanaging the team members, mutually discuss with the teammates, and set daily goals to be achieved in a day, clearly define the goals to be achieved and guide them in achieving the same and also the team leaders should keep themselves readily available to the team so that they can be easily reached out by the fellow teammates when needed. In order to do so, they can keep themselves available through multiple channels by technological means such as E-mail, Phone, WhatsApp, official Video Calling applications, etc. Recognizing one’s work and appreciating the same virtually may also encourage an employee by bestowing digital coins to their employee portals, a considerable accumulation of which would get an employee a gift in the form of a voucher/cash/coupon, etc.

Lack of face-to-face interaction prevents the virtual employees from building good and healthy working relationships with their colleagues leading to trust issues, as responded by more than 60% of the respondents. Employee Engagement activities may be designed in such a way that it’s not only a mere face-to-face interaction but also a productive communication among peers. Virtual Activities like short storytelling, experience sharing, extempore, or any other activity that makes the team members get to know each other well may be conducted. The team leaders may conduct a face-to-face video conference, where the teammates can be apprised of the career path they are moving on in the organisation and discuss the possibilities and opportunities of development in the organisation because even when an employee is working remotely, he/she should still feel the sense of belonging and attachment

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to the organisation. It is not only about building healthy working relationships with peers but also with the organisation as a whole. A team with rich cultural diversity may organise an engaging activity for the employees where they get to share their cultural experiences and present their cultural significance to the group. Such activities may help in making the team members feel more engaged with the group itself which would ultimately let them enjoy working.

As already discussed in the previous paragraph, it is of utmost importance to make the remote workers / virtual employees feel connected to the organisation and retain the sense of belonging to the organisation they are a part of. Hence, knowledge sharing is a very significant way of engaging the employees and making them feel like significant stakeholders of the organisation. More than 45% of respondents feel they would be more motivated and enthused to work if they are aware of the organisation's progress and position in the business market. Intra-Organizational Leadership Talks or Webinars may be conducted where the team members will be informed about the organisation's progress and accomplishments in the industry that it is operating. Such information about accomplishments would induce a sense of pride in the employees about their organisation. It may induce a sense of competitiveness in the employees that would make them work more effectively. Discussions about the company's past accolades and accomplishments through video conferencing applications may be used to enlighten employees about the values and philosophies of the organisation. The above three broad factors especially cater to employee engagement in the virtual context because, in the present era of technological advancements, consideration of these factors is technologically feasible and implementable.

Limitations

Certain characteristics of research cannot be controlled by the researcher due to the few limitations Due to time constraints, although the study has been carried out across diverse verticals, it confines itself to respondents across India only and therefore the results of the study may not transcend well to the global landscape of virtual workforce. Covering a wider area of surveying would have helped in considering the greater social and cultural differences. While conducting the research, the responses could not be verified by the respondents by cross-questioning them in order to follow up with varied ideas, which could have enriched the conclusions more. A different format of questionnaires where respondents have to respond in a descriptive manner is not applicable because of the shorter attention span of the audience. Therefore, the researcher has to resort to a fixed set of questionnaires on the basis of which the analysis has to be done while ensuring as much as possible, the questionnaire covers all possible angles of consideration of several aspects of the research problem.

Conclusion

To conclude, it is quite clear from the analysis that there are mainly 3 broad factors that virtual employees look up to in order to work effectively, viz; Leadership, Relationship & Communication and Knowledge Sharing. These 3 factors have a proportional effect on the virtual team's effectiveness as evident from the analysis done on the respondents' data. Therefore, the virtual employee engagement practices should be so formulated that they take these factors into consideration so as to better employee engagement leading to effective and efficient team performance.

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Establishing Mediating Role of Green Communication: A Green Banking Approach

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Introduction

The unprecedented Covid-19 pandemic ruined the world economies leading to uncertainty-volatility-fluctuation gripping the whole world and thereby putting a question mark on the long-term existence of business, environment, and people. At this juncture, the paradigms of new-millennium economics need to be reoriented in terms of the level of communication. The changing sphere for sustainable economies is forcing all industries to adopt green practices which leads to the perennial long-term existence of long-term triple bottom line 'people, planet and profit'. The need for sustainable financing paved the way for the development of ethical banks or sustainable banks popularly known as green banks. The growing narrative of sustainability, transparency, and accountability in green communication practices acts as a socially responsible financing institution that paves the way for the development of ethical banks and the adoption of green banking practices. It provides eco-friendly banking practices to customers and finances eco-friendly and social projects thereby reducing carbon footprint. The paper's coverage attempts to understand how well Indian banks are adopting green banking practices as a mediator of green communication and aims to identify the areas for further development of green banking in India.

Objectives

The overall objective of the study is to understand the level of perception among the general public about green banking as an effective tool of green communication for the holistic development of beneficiaries of banking services. The study focuses to identify the perception level of the green banking concept and traits, banking operations, lending policies, and adoption level of delivery channels for green banking among the general public.

Literature Review

It has been substantiated that the production of information and communication technology (ICT) goods and services influenced the quality of services rendered in the financial sector. The emergence of digitization led to innovation and growth in the economy. Researchers emphasized the need to recognize ethics as the core of banking operations. Ethical banking not only reduces credit risk but also reduces non-monetary risks like reputation risk, environmental risk, etc. The study revealed that the younger generation is more inclined toward green banking products. The author identified the challenges in implementing green banking strategies. One of the major challenges is the lack of concern for the environment. Researchers commented that the level of awareness of people towards green banking with

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respect to gender. Studies reveal that banks need to play a proactive role by adopting environmental and ecological aspects in lending principles which will force industries to adopt such practices which will help in the restoration of the environment. The latest UNEPFI initiative is the 'Net- Zero Banking Alliance' which focuses on the implementation of decarbonization strategies, developing an international framework and guidelines for implementation of the same through peer learning among founding banking signatories. The concerns for green finance led to the formulation of a voluntary risk management framework for the determination, assessment, and management of environmental and social risks associated with project financing. The growth and development of green banking in India are happening in a minuscule manner as none of the major banks accepted the concept in totality. In India green banking is restricted to the adoption of paperless banking in day-to-day banking operations by promoting net banking, app banking, and usage of credit and debit cards. The whole world is now embracing a safer and greener planet and the same has been accepted by all major nations including India. It has been unanimously agreed that banks need to undertake awareness programs to be aware and the MSME sector needs to embrace green banking in a holistic manner to retain a competitive edge over themselves and Indian industries globally.

Research Methodology

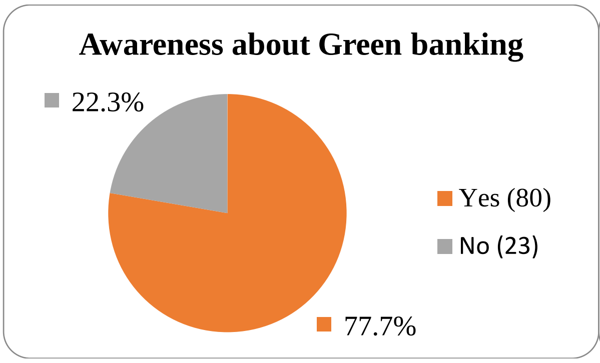
The research design is exploratory in nature and involves the usage of primary and secondary data. The primary data collection is done through a non-probabilistic convenience sampling technique. The sample size comprises 103 respondents located in and around the Kolkata region. The Likert scaling technique is used to obtain data on a scale of 1 to 5. The mean score of the responses is calculated by dividing the total score obtained by the total number of respondents. The mean scores describe the whole data which is then ranked accordingly from highest to lowest. Rank comparison is used for further analysis of data.

Data analysis

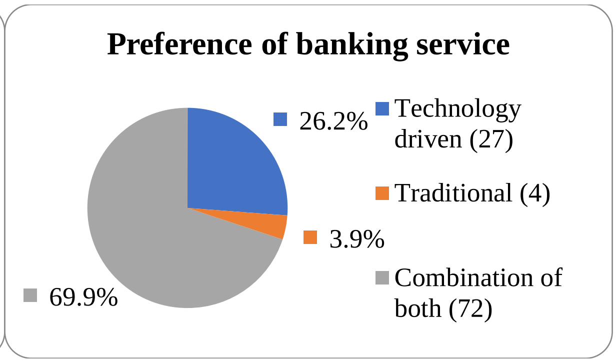
The study derived a multidimensional analysis of data, a brief of which is explained in the given illustrations.

I Awareness and Preference of the general public about the green banking concept

A1



A2



The data shows more than 70% of people are aware of the green banking concept and nearly 70% prefer combined banking services. It shows that 77.7% of the total 103 respondents are well apprehended with the concept of green banking. Again 26.2% of the total samples are in favor of technology-driven services. 72% of samples are in favor of a combination of both services.

II Traits of green banking practices

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The ranking of the traits that define green banking is the reflection of the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world we are living in. The banking scams and the pandemic caused so much friction in the economy which is reflected in the ranking framework. Sustainability, transparency, and accountability have been identified as the most important parameters which need to be imbibed in green banking practices.

Table A3

Parameters	**SA**	**A**	**N**	**D**	**SD**	**Total**	**Mean Score**	**Ranking**
Sustainability	50	38	13	1	1	103	4.31	1
Accountability	40	44	16	2	1	103	4.17	3
Transparency	53	32	16	0	2	103	4.30	2
Integrity	36	42	22	2	1	103	4.07	4
Confidentiality	39	32	25	5	2	103	3.98	6
Importance of Social Values	38	38	24	1	2	103	4.06	5

Source: Primary survey

The table A3 shows the traits which define the green banking practices. The traits of sustainability, transparency, and accountability have been ranked higher by people as these traits are considered the need of the hour

III Benefits in day-to-day banking operations

Green banking in the form of digital banking through digitization of banking operations provides banking services at the touch of the finger. Digital banking is well-accepted among customers. Customers prefer digital banking due to its fast and efficient services, so it is ranked highest.

Table: A4

Parameters	**SA**	**A**	**N**	**D**	**SD**	**Total**	**Mean Score**	**Ranking**
Faster and efficient service	65	29	7	1	1	103	4.51	1
Enhanced accountability	44	42	14	2	1	103	4.22	4
Round the clock service availability	52	38	11	1	1	103	4.35	2
Real-time data availability	48	44	9	1	1	103	4.33	3

Source: Primary survey

The table A4 highlights the benefits of adopting green banking practices in daily banking operations.

IV Benefits in the lending policy

The perception of people is that if green banking is adopted by banks in their lending policy it will lead to the development of sustainable and social infrastructure. Moreover, the credit

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policy of banks will be guided by ethical principles as it is ranked 3rd with a mean score of 4.03. These parameters are ranked topmost by people.

Table: A5

Parameters	SA	A	N	D	SD	Total	Mean Score	Ranking
Promotion and development of sustainable infrastructure	44	44	13	1	1	103	4.25	1
Promotion and development of social infrastructure	38	42	21	1	1	103	4.12	2
Reduction of bad loans	26	33	38	4	2	103	3.75	5
Recognition of ethical practices in credit appraisal	34	40	28	0	1	103	4.03	3
Better returns from credit	28	41	31	2	1	103	3.90	4

Source: Primary survey

The table A5 self explains the benefits of adopting green banking practices in lending policy as perceived by people.

V Adoption level of green banking delivery channels

The data indicates that internet banking and mobile banking are highly preferred by customers as they have a mean score of 4.32 and 4.29 respectively. A unified payment interface (UPI) is the third most preferred option. SMS banking is also a preferred option among customers. Point of sales (POS) and use of recyclable cards are still not so popular as their mean score is on the lower side. The least popular delivery channel among customers is solar ATMs.

Table: A6

Parameters	SA	A	N	D	SD	Total	Mean Score	Ranking
Internet banking	55	34	9	2	3	103	4.32	1
Mobile banking	53	36	7	5	2	103	4.29	2
SMS banking	43	29	22	7	2	103	4.01	4
Unified Payment Interface (UPI)	48	29	20	3	3	103	4.13	3
Point of Sales (POS) terminal	31	30	32	6	4	103	3.76	6
Use of Solar ATMs	33	22	34	8	6	103	3.66	7
Use of Recyclable Debit/ Credit cards	38	37	17	7	4	103	3.95	5

Source: Primary survey

The table A6 shows how people have adopted the different green banking delivery channels and the ranking shows the popularity and awareness of the green banking delivery channels among people.

Implication

The proponents of green banking and its practices can usher a new stepping stone to move forward in this pandemic-stricken banking through the mix of ethical and digital connotations for holistic transformation of the banking sector. The issue of global warming can also be addressed as green banking practices will prevent banks from funding polluting industries or promoting polluting technologies. . Thus it can be rightly claimed that green banking and its practices will lead to the cleanliness of nature, society, business culture and the people living in the society thereby leading to sustainability of people, planet and profit in the true sense of the term.

Discussion and Conclusion

The promotion and adoption of green banking require a two-pronged approach in policy formulation to address the issue of both ethical banking and digital banking embedded within the concept of green banking. Banks in India work under the directives of the Government and RBI, so to incline banks towards ethical banking principles the prima facie initiative needs to be taken by the Government and RBI. This will help public sector banks to become green in real nature and will in turn force the industries to adopt environment-friendly practices which will lead to low carbon emissions. Digital banking or using of fintech in normal banking operations is a way forward in the future years to come as it is beneficial both for banks and the public. However, considering the literacy level and the elderly population of the country, moving fully towards a technological-driven banking solution may lead to rampant fraudulent financial activities in the country. The promotion of digital banking on a large scale requires supreme data security and strong IT infrastructure to handle such a large pool of data on a real-time basis. Finally, the Government, RBI, and banks need to work in a collective manner more and more for spreading awareness through the effective mediums of green communication about digital literacy countrywide.

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Profiling Employee Engagement Dimensions and Outcomes: A Case of Indian Public Sector Enterprise

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Introduction

The term Employee Engagement is of great concern to all the organizations in the current scenario. Studies reveal a considerable list of antecedents of employee engagement. However, the HRM practices to be followed and the system settings to improve employee engagement are yet to tap (Saks, 2021). Improvised and enhanced employee engagement level is a driver for goal attainment of an Organization. Therefore, it has now become widely accepted that increasing employee engagement can give businesses a competitive edge. (Schneider et al., 2017).

Schaufeli et al. (2002) have defined Employee Engagement is a "Positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption" (p.74). Similarly, Rich et al., 2010 reported employee engagement as a "Simultaneous investment of an individual's physical, cognitive, and emotional energy in active, full work performance"(p.619).As per the Model of caring human resources management and employee engagement (Saks,2022), care for the organization towards employees results in employees reciprocating the same to the organization and leads to employee engagement. But it is uncertain to believe that every employee in the organization needs the same caring HRM practices like Job design, Training-development, Flexible work arrangements, work-life balance programs, etc. As it goes, one size does not fit all. Thus there is a need to profile employees based on dimensions related to Employee engagement. This research aims to profile the employees based on engagement dimensions and engagement outcomes (say, stay and strive) in line with the Aon Hewitt model of Employee Engagement and understand engagement level with respective to age, years of service and grade of employment. The results help one to know the characteristics of each employee segment so that one can formulate or define the HRM strategies or practices to improve engagement accordingly.

Methodology

This study involves identifying employee engagement dimensions and engagement outcomes. Based on these insights, the characteristic profiling of the employee is done. In the next phase, the characteristics of each segment of employees are defined in terms of dimensions involved in the study and their employee engagement level. Hence this research falls under the descriptive type of study. The sample includes a count of 506 employees obtained by random sampling in every unit of an Indian Public Sector organization. Data used for this study is primary data collected using a questionnaire. Questions designed to measure Cultural Dimensions -CD (items include openness, collaboration, confrontation, Innovation, Autonomy &Trust), Leadership Dimensions- LD (items include Visioning / Sense of

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Direction, Consistency, Communication, Approachability),Business Alignment Dimensions-BD(items include Alignment of Individual with Organizational Vision & Mission, Values, Strategy & Goals),People Processes-PP(Career Growth, Reward & Recognition, Learning & Development Opportunities, Performance evaluation & Reward) and Job /Role related dimensions-JD(items include Role Clarity, Job Fit, Role Significance, Learning, Skill Variety, Task Variety, and Resources). Engagement outcomes are measured through Say (Speak positively about the organization to coworkers, potential employees, and customers), Stay (Have an intense sense of belonging and desire to be a part of the organization) and Strive (are motivated and exert effort towards success in their job for the company) variables. A Likert Scale of 1-5 ratings is used for measuring where 1 stands for a strong disagreement and 5 for a strong agreement. Latent Profile Analysis (LPA) is the statistical tool used for analysis through the R Platform.

Literature Review

The study on the model of caring human resource management and employee engagement reveals that an organization caring for their employees is a base for engagement (Saks, 2021). This helps us to understand how important HRM policies are in enhancing engagement. This model may not fit all employees. Thus we need to know the profiles of the employees so that we can design a tailored strategy that reflects an enhanced employee engagement level certainly. Boccoli et al. (2022) reported that high-level Employee Engagement enhances job satisfaction and performance among employees. This paves a path for formulating strategies aiming at High-level Employee engagement.

Van Zyl et al.(2020) signifies the importance of using LPA. In this context, the research obtained 3 profiles solutions. Thereby each profile has its characteristics. This way of addressing heterogeneity in the sample implies a better understanding of their profile. Hence decision-making done on the basis of these profiles at a later stage would be effective. Ramaite et al.(2022) have used Latent Profile Analysis (LPA) technique to profile samples into profiles in the context of work engagement. Hence it’s evident that LPA can be used for profiling concerning engagement dimensions and thereby giving insights to improve engagement.

Data Analysis

Latent Profile Analysis (LPA) aims to perform profiling or segmentation of data. It addresses the heterogeneity in the sample, based on that LPA segments sample into several profiles .where, a sample of each segment has their characteristics. The number of profiles is predetermined before the analysis. Firstly starting from the number of profiles 2 to 9 posterior fit statistics are obtained and based on the posterior fit statistics an optimal number of classes solution is determined. The probability that it falls under a particular class is obtained for all the observations. Thus the LPA estimates profiles based on the distributional assumptions. The Fit indices for each segment are obtained. As per the evidence from the literature, the lower the values of AIC (Akaike Information Criterion), BIC(Bayesian Information Criterion), and ABIC (A sample-size adjusted BIC) the better the fit of the model. If the entropy value is closer to 1 it implies a smaller classification error. An assessment of the plot of the profiles obtained from the analysis revealed that the 6-profile solution had lower AIC and BIC scores and better entropy values. However, under this solution, the 3rd profile contains only 2 sample respondents which seem very less than the acceptable value of 25 participants per profile (Lubke & Neale, 2006). Moving further, the 7-Profile solution had a lower AIC and BIC score and a good entropy value. However, in two profiles of this solution, only 2 and 6 sample respondents were included which is not acceptable again. Hence, we have chosen the 5-Profile solution as an optimal one. The average scores of CD, LD, BA, PP, JD, SAY,

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STAY and STRIVE were obtained for each profile. On this basis, the characteristics are determined for each segment under all dimensions of the study.

Figure 1

Profile wise Sample Percentage

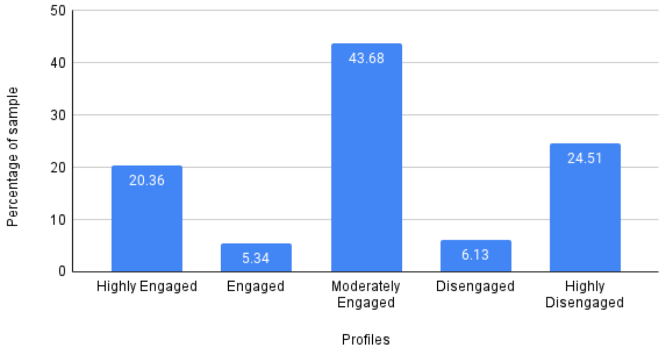
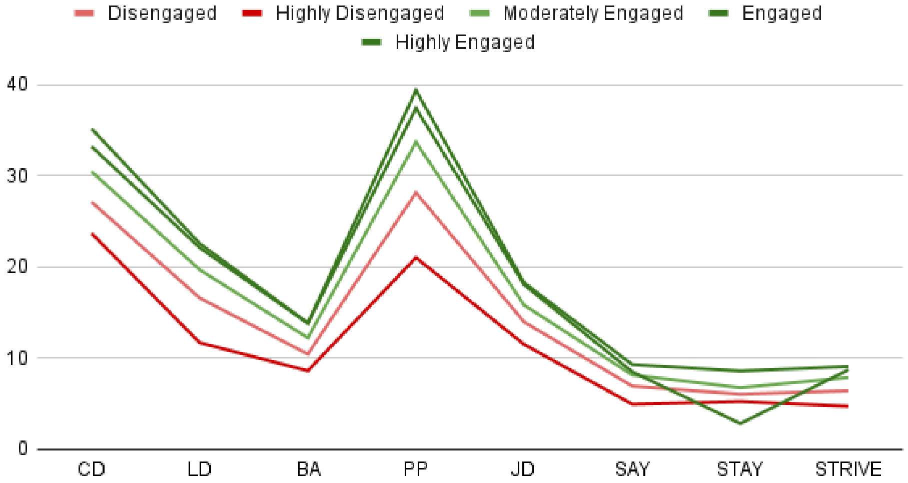


Figure 2

Characteristic Profile of the Sample



In the next stage the Profiling Employee Engagement Levels with respect to Age, Years of Service in the organization, Grade of Employment is done.

Figure 3

Employee Engagement Levels with respect to Age

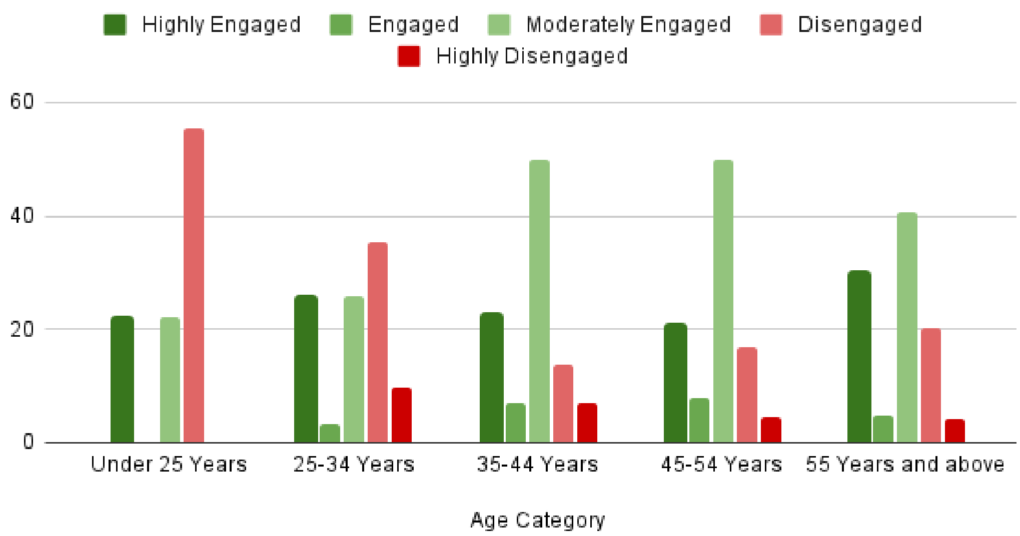


Figure 4
Employee Engagement Levels with respect to Years of Service in the Organization

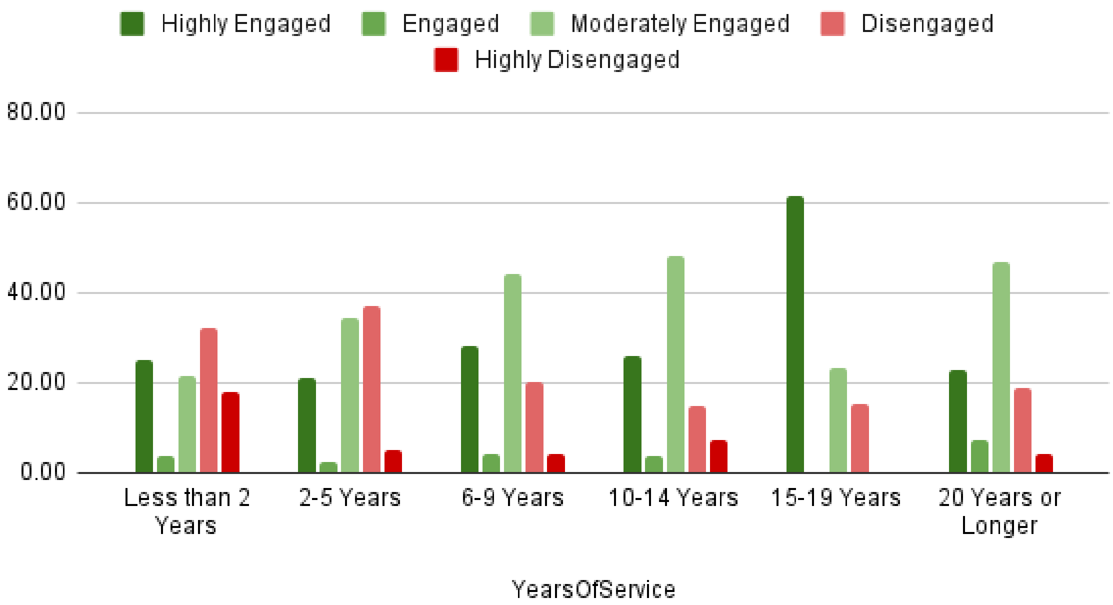
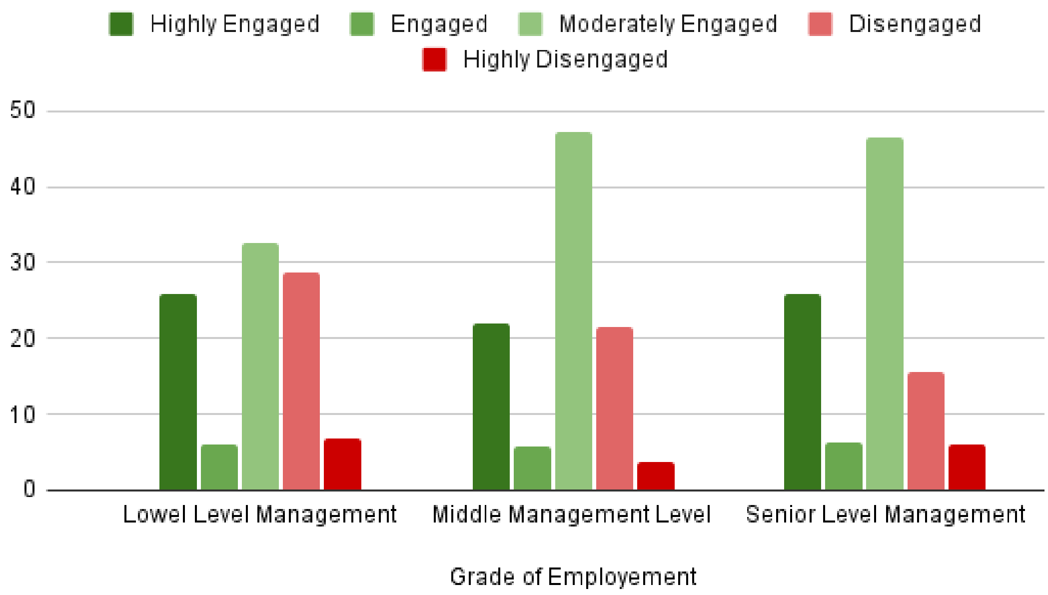


Figure 5
Employee Engagement Levels with respect to Grade of Employment in the Organization



Discussion/Conclusions

The Major findings are that the sample is segmented into 5. i.e., Highly Engaged, Engaged, Moderately Engaged, Disengaged and Highly Disengaged. The highly engaged segment includes 25% of the sample. The score for all the dimensions of engagement (CD, LD, BA, PP, JD) and engagement outcomes (SAY, STAY, and STRIVE) are very High. This could be because the employees of this segment are very much workaholics and thus engaged. On the other hand, the disengaged segment has 6% of the sample characteristics which include Moderate CD, LD, JD, SAY, STRIVE and low BA, PP, and STAY. The sample scoring low in all dimensions and outcomes of engagement is the Highly disengaged class which included 20% of the sample. This is an important chunk of the employees to be focused on to improve their engagement. As their engagement level is low, organizations cannot expect a desirable performance from them, instead, they are a cost to the organization. From analysis it is evident that not just attracting talent but also designing strategy to engage employees and retaining them through effective people process, career growth and challenging roles is equally important.

Implications

Research Implications

This study gives a direction to understanding the heterogeneity in the sample and based on this further research can be done to suggest different strategies or HRM practices for improving employee engagement in an organization for every segment of the sample. This helps in reducing the uncertainty of success while implementing employee engagement interventions in an organization.

Practical Implications

This study helps us understand the characteristics of each segment. Thus, an organization can design strategies to improve every dimension like Culture, Leadership, Business goal Alignment, People processes, and Job /role Design. Being specific to the segment of the sample and also specific to the characteristics to be improved makes the job of strategy design easier and more effective to enhance employee engagement.

Keywords

Engagement Dimensions, Engagement Characterization, Engagement outcomes, Latent Profile Analysis, HR Strategy re-design.

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Self-insight, as a Powerful Tool for Effective Leadership

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Keywords: Leadership, self-insight, diligence, honesty, leading team, emotional intelligence

Geo-political wars, social networking, globalization, start-ups, digital revolution renewable and green technology, manpower outsourcing, environment conversions, resources insufficiency, cyber-crime, financial crisis, terrorist activities, and biological warfare in the world, all indicate that leaders today now face major challenges and difficulties that they couldn't even have imagined a few years ago. 84% of leaders' surveys say that the definition of effective leadership has changed significantly and transformed with every single passing day.

Quick networking, digital connectedness and interactions, and agility are becoming essential traits of every leader's job. The leaders are in corporate, government, armed forces or navy, in the education segment, or in communal services, a leader has to be able to respond swiftly, efficiently, and effectively.

This paper is the outcome of the telephonic interview conducted with the director of IOCL Refineries, Ms. Sukla Mistry, the first woman Director heading a key position in the Petroleum Segment. As per Madam Mistry, Leadership is more than a set of skills that are required. It depends on a number of individual qualities that are hard to comprehend but are very influential and commanding. These include things like honesty, audacity and modesty. Virtuous leadership springs from a sincere and genuine concern for the people. It also requires emotional connectedness. During Pandemic Ms. Mistry maintained a close connectedness through various digital platforms, not only with employees but even with the families and employees' dependents.

Self-discovery and peculiar understanding are also equally topmost characteristics of effective leaders.

True leaders tend to have uncluttered minds that welcome innovative ideas rather than closed minds with limiting ideas. Leaders listen to what people want and take action to resolve conflict, they are always willing to serve the larger good rather than try to squeeze everyone into the same mindset.

Introduction

A set of skills is only one aspect of leadership. It depends on a variety of personal traits that are challenging to understand yet are incredibly powerful and dominating. Honesty, audacity, and modesty are a few of these. Genuine concern for the people is the source of good leadership. Additionally, emotional resiliency is necessary. Leaders must have the fortitude to own their errors and uncertainties, to listen, to trust, and to learn from others. The road of self-discovery and odd understanding may be required of leaders.

Effective leaders are known for knowing who they are and what they stand for. They also have the courage to follow through on their convictions. True leaders typically have open

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minds that embrace novel ideas rather than closed minds that reject them. Leaders are willing to serve the greater good rather than trying to get everyone to have the same mindset. They listen to what others have to say and act to resolve conflicts.

Emotional interconnectedness and networking are the possessions of a versatile leader

perfect networking with teammates, outside industry partners, collaborators, stakeholders, and media partners undoubtedly fabricate a harmonious culture of working together with a broadminded outcome. Or else most of the human energy is drained in conflicts and clashes. Instead of a restricted approach leaders should always welcome innovative ideas and out-of-the-box forward thinking. Which can infuse fresh energy into the team and to a great extent new pedagogy for performing a task can be devised. By motivating and inspiring employees' the group can be led in an efficient manner. Through the emotional interconnectedness among the team, employees feel free to give suggestions. Any small innovative suggestion could be a fertile step that could pitch a new idea and can be the growth engine for any organization.

Foresighted, Deterministic yet Generous

Generous behavior backs a very constructive impression that gives stimulus to the workforce and positive impetus that guides and induces in the team a determination to do something very constructive for the organization. So, this leadership trait can be very positive and result-oriented for any corporate. When the leader is fortified with a far-ahead vision and determined to achieve the desired goal, he or she remains ready to devise and strategy be it modesty, generosity, or resilience. That makes a leader more empowered to do both Macro and micromanagement with the teammates.

Curating the art of communication

For building a perfect team apart from getting empathize and benevolence, effective and quick communication also creates a positive image and maintains goodwill that the leader is taking extra efforts to encourage and motivate the team. Being a Good communicator, he must also listen patiently to the team and be emphasized for resolving conflicts. Clear concise and constant communication clarifies all assumptions and provides the right direction to the team. Clarity is not just a word it's a device to dissolve all confusion and soften all contradictions. Being in touch with the employees, seeking their advice, consulting, and constantly communicating with partners and collaborators, gives a winning edge to the organizations. Through constant communication, even bigger issues can be deterred and minimized crisis situations while on the contrary volatile media coverage can spoil the goodwill of the company just at the moment. If we minutely study political issues, war fares, fire incidences, breach of trust issues, and losses, they are mostly centered around improper or lack of communication. So, maintaining quick yet precise communication helps grow credibility and trust among the team. Thus, effective communication is one of the important leadership traits. Not only communicating with the team but also intrapersonal communication helps explore the hidden potential and gives clarity to our own decisions. Effective Leadership is not an inherent trait but rather can be nurtured through developing self-insight.

Straight and honest communication can be the key performing zone for a leader. A true leader must have very subtle, sensible, and comprehensive communication with teammates. A leader must be a very profound communicator. Using the method of conveying through storytelling to influence people and by avoiding certain redundant illustrations a leader can infuse energy and can promote cooperation among the groups. By giving certain rewards, sponsorship, and appreciating the diversity of thoughts, leaders can win employees' trust and sincerity towards them. Leadership is not just one quality, it's a set of skills that needs to be constantly revised within the self, explore, and innovate at each step, to achieve perfection and excellence.

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Literature Review

Self-insight refers to the nature of our understanding regarding important aspects of the "self-system ". Our self-insight looks into the depths of how we see ourselves. (Sandesh & Sharma, 2020) "The process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives". (Gary yukl, 2016). True leaders tend to have uncluttered minds that welcome innovative ideas rather than closed minds that cast-off new ideas (Friedman, 2018). Emotional interconnectedness and networking are the possessions of a versatile leader. (Ganta, and Manukonda, 2014). Perfect networking with teammates, outside industry partners, collaborators, stakeholders, and media partners undoubtedly fabricates a harmonious culture of working together with a broadminded outcome. Any small innovative suggestion could be a fertile step that could pitch a new idea and can be the growth engine for any organization**.**

Qualitative research, a case study approach was carried out by taking a telephonic interview with 3 respondents, and the important requisite or trait that helps in leading a team effectively and efficiently which was emphasized by our 3 respondents was constant communication is one of the important leadership traits. Not only communicating with the team but also communicating with self, exploring self, and developing keen insight to stretch yourself against boundaries helps explore your potential and gives clarity to our own decisions. Emotional intelligence and building trust are vital for building and sustaining relationships with the team or stakeholders

Research methodology

A Telephonic interview was conducted with 3 Respondents Ms. Shukla Mistry, and Mr..Murari Shanker, and Mrs. Prama Bajaj for sharing their views on Leadership traits. Our sampling technique was based on qualitative research and followed the case study Approach which will take us closest to the truth and provide authenticated information.

Questions asked during the telephonic interview

Que 1. What do you think is that important requisite or trait that helps in leading a team effectively and efficiently?

Que 2. How do you motivate your team or employees to achieve the set target?

Que 3. Madam/sir can you share some success stories where in a time of crisis you came out with glorious colors?

Que 4. Any message or advice you would like to give to budding managers, entrepreneurs, and leaders as a Success Mantra?

Que 5. Leaders are born or made with perseverance and determination.

Reference and description table with sampling data.

Names	Description	No. of questions asked	No. of responses
Ms. Shukla Mistry	**Director IOCL**	**5**	**5**
Mr. Murari Shanker	**CTO, CyRAACS**	**5**	**5**
Mrs. Prama Bajaj	**Marketing Director**	**5**	**5**

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Results & Discussion

Conclusion drawn based upon Ms. Sukla Mistry's & Mr. Murari Shanker elaboration

Q1. What do you think is that important requisite or trait that helps in leading a team effectively and efficiently?

Respondent 1

Ans 1. Constant communication is one of the important leadership traits. Not only communicating with the team but also communicating with self, exploring self, and developing keen insight to stretch yourself against boundaries helps explore your potential and gives clarity to our own decisions, which has helped me quite a lot during my tenure at Barauni Refinery.

Respondent 2

Ans 1 A large part of a manager's job is to communicate content and strategy internally and externally, so communication skills are an important leadership quality. By setting a good example, managers also have role model capabilities because their bosses are constantly being watched. Managers who ask their employees to do things they don't do quickly lose credibility.

Respondent 3

Ans 1. The ability to communicate clearly, concisely, and skillfully is an important leadership skill. Communication is more than just listening carefully and responding appropriately. This includes sharing valuable information, asking smart questions, soliciting opinions and new ideas, clearing up misunderstandings, and clarifying what you want. The best leaders also communicate to inspire and motivate their employees.

Q2. How do you motivate your team or employees to achieve the set target?

Respondent -1

Ans 2. Sometimes conveying expectations through storytelling to influence people and appreciating their efforts infuse energy and promote cooperation among groups. I think for leading a team, building trust and credibility is an important requisite. The art of oratory, connecting dots through perfect narration is an asset of a leader or Manager. Your own actions inspire others. So there is a lot of variables that serve as a motivating agent to inspire a team. Utilize meetings as an opportunity to let your team get to know you better. Allow them to learn from your stories, your experiences, and the lessons you have learned in your career. Let your employees know that you appreciate the work that they do, especially if they go above and beyond what's expected of them. Send them 'thank you' notes, and make sure that their colleagues, peers, subordinates, and even your leaders know the exemplary performance you are acknowledging them for. Make it a point to listen to each of your team's ideas. One of the ideas thrown out may just be the one you are searching for. Listening to individual concepts will also allow you to identify those who do not share your goals. This can be a good opportunity to steer them in the right direction.

Respondent -2

Ans 2 We will have our employees come to us first, then our customers. Clarify roles, share a vision, and set clear goals. We mandate communication with employees by taking them to team lunches and engagement activities and using meetings to interact with employees and resolve conflicts. Emotional intelligence and building trust are essential to building and maintaining relationships with teams and stakeholders.

Respondent-3

Ans2. Communicating expectations through storytelling that impacts people and acknowledging their efforts can inject energy and foster collaboration between groups. Building trust is key to leading a team I think it's a requirement. The art of rhetoric,

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connecting the dots through impeccable storytelling, is an asset for executives and managers. Your own actions inspire others. As such, there are many variables that can serve as motivations to inspire your team. Use the meeting as an opportunity for your team to get to know you better. Let them learn from your stories, experiences, and lessons learned in your career. Let your employees know that you value their work, especially when you exceed expectations. Send them a thank you note to make sure their peers, peers, subordinates, and even your superiors recognize the exemplary achievements you recognize them for. Please listen. One of the discarded ideas may be exactly what you're looking for.

Q3. Madam/ sir can you share some success stories where in a time of crisis you came out with glorious colors?

Respondent -1

Ans 3. Emotional intelligence and building trust are vital for building and sustaining relationships with teams or stakeholders. During the pandemic when almost every day there were more than 50 to 55 cases reported per day in our township at Barauni Unit and our major manpower was stuck in contentment zones, running the refinery and managing shift rotation was a tough challenge while petroleum products were considered under necessary services.

I started an initiative of conducting online meetings with the family members and housewives of the employees, asking about their well-being, conveying to them the assurance of providing medical facilities, food, and other essential services, etc at the Covid centers, so that the patient doesn't feel unsafe in reporting their cases and shifting to Covid centers has helped me a lot in managing and controlling Covid completely, no casualty was reported at township and recovery ratio was also very high. The emotional and physical health of the families was also one of the main concerns, which was totally the outcome of emotional assistance and constant communication. So in my opinion any bigger challenge or crisis can be minimized through emotional intelligence and effective communication. For emotional connectedness, not any deliberately planned team-building activity is required, just a spontaneous after-office entertainment activity, like organizing a movie for employees together or a family dinner with your staff can be an effective way to connect with them. They will also get to appreciate that you are trying to support their work-life balance.

Respondent -2

Ans 3 The mystery recipe to inspiring personnel is to realize the "ingredients" of the humans you're motivating and inspiring. Goal-setting is connected to the project's overall performance and is the primary supply of intrinsic motivation, this is the incentive pushed with the aid of using a hobby withinside the project. Openness and the direct involvement of group contributors withinside the selection making is some other important step. Provide assistance and facilitate dialogue to assist the group resolve troubles. Coach and inspire them in fixing the troubles as opposed to bringing them to you to resolve.

Respondent -3

Ans 3 When it comes to describing leadership in general, the answers are endless. Essentially all great leaders in the B2B environment can exhibit exponential qualities and traits that foster growth and cohesion among organizations. The most important aspect of leadership that leaders often overlook is the ability to listen. This can range from listening to internal employees to what customers say when they say "listen". The ability to listen allows leaders to truly understand, understand and grow as individuals. In essence, listening and fostering growth leads to humility beyond the work environment. Persistence is the only advice I would give to all women in the B2B environment. Constant attention to getting work done, persistent listening, never giving up or losing hope, and continuing to do good work and strive are all elements that make up a woman's B2B leader. Achieving specific goals and

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visions can be difficult, but sustained determination leads to better results. It takes courage and hunger to succeed in the B2B world. Grit and tenacity get the job done.

Q4. Any message or advice you would like to give to budding managers, entrepreneurs, and leaders as a Success Mantra?

Respondent -1

Ans 4. There are no shortcuts to success, out of box thinking, persistent efforts, strong determination, and a sound value system are the four pillars of excellence. Follow them with passion. Have a dream and chase them with perseverance. Look out a window with a view instead of keeping yourself in a four-cornered room. Do a 'walking meeting' in the fresh air with a few team members as you brainstorm; a relaxed environment may help your team come up with new ideas.

Respondent -2

Ans 4. First of all, no one is born an entrepreneur. The ability to accept constructive criticism and feedback is key to moving your business forward and staying competitive. A clearly defined vision and goals are crucial to your success. A clear vision and focused approach are the first practical steps to mentally preparing yourself to face challenges.

Respondent 3

Ans 4 Never accept less and continually push yourself to analyze as a whole lot as you can. I earned the honor of my friends and leaders via way of means of turning my ardor into expertise. Learning how to talk out and now no longer being scared to explicit myself has allowed me to develop from contributor to leader, which has been critical to my career. Maintaining regular dedication is one of the only approaches to setting up management effect and respect. Make positive that your crew is aware of you are there for them. This is how your logo earns accept as true with respect.

Q5. Leaders are born or made with perseverance and determination.

Respondent -1

Ans 5. Effective Leadership is not an inherent trait rather can be nurtured through developing self-insight, perseverance, clear vision, and farsightedness, and the will to perform can evolve leadership. Flexibility is definitely one of the most important leadership aids as the business environment has changed so much, it is very unpredictable and is constantly changing, faster than ever.

Respondent-2

Ans 5. People can become leaders through the process of teaching, learning, and observing. Leadership is a set of skills that can be acquired over time through training, perception, practice, and experience. Learning leadership is a lifelong activity. Great leaders can be encouraged by developing self-awareness, determination, clear vision, and foresight that help them seek opportunities for growth and learn new skills.

Respondent -3

Ans 5. A leader is someone who comes ahead to take the challenge. Leadership comes with a broader imagination and prescience to strategize, plan and construct frameworks. Effective Leadership isn't an inherent trait instead may be nurtured thru growing self-insight, perseverance, clean imagination, prescience, and farsightedness. For me, management is likewise approximately consistency — excellent leaders are guided via way of means of sturdy values and concepts that don't waver so that you recognize their phrase is true, they have got requirements that don't extrude primarily based totally on the target market or who they spoke with last, you could now no longer usually trust them however you recognize how they made the decision. There has by no means been a greater crucial time for leaders to offer accurate, empathetic verbal exchange with transparency, truthfulness, and timeliness.

Implications

Effective Leadership skills can help leaders to gain the trust of employees, making other tasks easier to operate because the employees trust their leaders. By becoming more self-aware, and subsequently recognizing their strengths, weaknesses, and hidden biases, leaders gain the trust of their team members — and increase their own credibility. Leadership is not just one quality it's a set of skills that needs to be constantly revised within the self, explore,d and innovative at each step, to achieve perfection and excellence. True leaders tend to have uncluttered minds that welcome innovative ideas rather than closed minds that cast-off new ideas. Leaders listen to what people want and take action to resolve conflict, they are always willing to serve the larger good rather than try to squeeze everyone into the same mindset. Best leaders can make optimum use of this skill which certainly brings a paradigm shift in effective leadership theories. Leadership is not just one quality it's a set of skills that needs to be constantly revised within the self, explore, and innovative at each step, to achieve perfection and excellence.

Limitations & scope of Future research

- Small sample size – we could only conduct interviews for 2 respondents because of time constraints.
- Telephonic interview could not capture the body language & gestures of Mr. Murari Shanker, Ms. Shukla Mistry& Mrs. Bajaj
- Because of the distance from Bangalore to Delhi IOCL Head quarter and busy schedule of Mr. Murari and college classes we couldn't get a chance to meet them face to face.
- If would have got the opportunity for face to face interview, then validation of our respondents could be possible.

Conclusion

According to Ms. Shukla Mistry, Leadership that is effective must be able to adjust to the times. This prompts us to consider innovation and creativity as a component of the top leaders' skill sets. A leader can use these traits to provide their organization or team with a competitive edge. Check your progress on a regular basis to see how well you are adjusting to the change and how you are modeling this for your staff. Find uninterrupted time in your schedule to sit down and think. Setting goals for both you and your team will be made easier due to this. Consider new thoughts or ideas that could enhance performance during this time. Simultaneously your decisions as a leader will determine your excellence or will to achieve perfection.

Determine your organizational and personal values. How do you conduct yourself at work? What are the guiding principles of the company that made you want to work there? Recognize and uphold the ideals that your organization stands for. Ensure that the company's ideals are reflected in all areas. Once you understand how your own values intertwine with your organization, you will be able to incorporate both sets of values in your decision-making process.

Emotional Intelligence is about Keeping a personal touch with employees for their and their families' well-being creates a positive impact. Research shows that emotional intelligence (EQ) is associated with transformational leadership. Magnetism, desire to lead, interdependence, passion, courtesy, and admiration for individuals are the important facets of emotional intelligence. Emotional intelligence has the power to divert entire human energy towards achieving the desired goal. Best leaders can make optimum use of this skill which certainly brings a paradigm shift in effective leadership theories.

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In the cutthroat competitive world achieving deadlines and targets is a challenge for which it is necessary to create a high-performance work culture. During Covid-19, Ms. Shukla Mistry madam has maintained a high-performance work culture by closely connecting to the families and housewives of employees through various digital platforms, informing them about all possible measures and strictly advising them to follow SOP issued by the management, to safeguard employees during Covid-19.Thus, for aligning performance, quick decision-making and its implementation is the result of self-insight, and closely observing situations with diligence and perseverance, these are some very effective and well-proven tools of effective leadership.

Thus, from stabilizer to change manager, from regulator to facilitator, from competitor to collaborator from incongruities to diversity promoter true leaders develop and evolve as a true leaders and master the art and science of leadership. to build a consistent and more promising team, leaders need to nurture the ability to make healthy associations at the workplace. These relations increase employee engagement and according to a research analysis of employee engagement, good relation leads to fewer quality defects and less absenteeism, and an increase in productivity.

If your team is highly engaged and happy at the workplace, you will be valued and appreciated as a good leader. You will be better guided when high-stress situations arise as you know what the non-negotiable items are for yourself and your organization. Based upon the telephonic interview Ms. Shukla and Mr. Murari Shanker emphasized the need for Emotional intelligence, quick decision-making, and foresighted vision, which can definitely prove to be a milestone in achieving the set target.

Bajaj shared his thoughts on the characteristics of leadership, saying that leadership involves a broader vision for strategizing, planning, and creating frameworks. Additionally, collaboration with stakeholders works very well because of the coherent approach. At the core of B2B leadership is building empathetic relationships with customers, partners, and employees. A customer-centric mindset is central to being a trusted advisor and problem solver.

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Use of Artificial Intelligence in Human Resources in IT Industries

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Abstract
Artificial Intelligence is evolving as the most desired tech tool that can be leveraged to provide cutting edge business solutions. Its impact is estimated to be tremendous compared to conventional methods. Post-pandemic, human perspectives about regular activities have seen a paradigm shift, and one of them is virtual human resourcing. This work talks about the role of Artificial Intelligence in Human Resources and its impact on IT companies. The paper describes the tools and techniques available for smart talent acquisition without human interventions. The paper also reports the merits and demerits of various tools and technologies in human resources operations while elaborating on the impact of Artificial Intelligence in Human Resources. Use of Artificial Intelligence and to be more specific use of Machine Learning, Deep Learning, Data Analytics, Natural Language Processing, Computer Vision, Quantum computing and Robotics in Human resource functional areas such as talent acquisition sub-process steps like Job description Management, Sourcing, Screening, Assessment Process, Offer and Post Offer onboarding Process. The Paper also briefly touches upon Human Resources Business partnering and Learning and Development.

Keywords: Talent Acquisition, AI, HR, IT Industry, Data analytics, Natural Language Processing, Computer Vision, Quantum computing, and Robotic process automation.

Introduction

The world is moving towards digitisation of systems for effective performance. The most important and primary activity in an organisation is the identification of talent and sustaining it. Talent acquisition has evolved dramatically over decades and is still reshaping its concepts of recruitment, while human resources are finding ways to improve employee performance. Human intelligence continually explores a better and smarter way of executing things. Over a few decades, computers and Artificial Intelligence (AI) have pitched in to make life easier for mankind. As Guiseppa et al (2020) stated that 'positive technologies' were developed to improve the quality of individual achievements, which eventually improves the achievements of the organisation. Policymakers of a company started analysing data to provide better facilities and create ergonomic environment within the organisation. As the data is huge, there is a need for smart technologies like AI, which are smart, quick, and effective in delivering results. A system is needed to bridge the gap between the demand and supply for the growth of an organisation. Human Resource Management's (HRM) main motto is to ensure the latest technologies and facilities are available to the employees of organisation so that the employees get motivated and improve their performance. Collings et al (2018) has

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studied that Human Resource Information System (HRIS) is meant for developing soft skills and as well as hard skills among employees.

Literature Review

Alexis et al (2021) have done a systematic literature review about AI role in HR and discussed various techniques and technologies being employed in talent acquisition. They have appreciated the role of Artificial intelligence specifically and how this is managing HR systems. They have also discussed the gaps between theoretical knowledge available in the field of AI and practical implementations of the same. It is observed from the above literature review, in the field of AI in HR, that previous works are restricted to selected fields of applications, viz., FMCG, Entertainment industries, etc., with limited accessibility of data management. In view of the above, the present study and this paper discuss the tools available for talent acquisition and human resource development in the field of IT industry. It also discusses the implications of applying such techniques and technologies in HR. The focus of this paper is restricted to the IT industry as the data and purpose can be narrowed down for better accuracy and applicability. According to research conducted by Randstad, it revealed that about 96% of Human resource professionals believe that AI can enable talent acquisition process significantly and according to the recent inputs Harvard Business Review (HBR), In addition to the recent success that AI has seen, it is estimated that AI will be incubated in IT functions too with an approximate 44 percent of its business groups

Objectives:

1. Build a Maturity Model to understand the use of AI in HR function
2. Predicting the current Maturity Stage of a Company
3. Enabling them to upgrade to the next level of the maturity model.

Research documentation

This paper dwells upon those AI tools and software that will help in different phases of talent acquisition, as stated below.

Job Posting and Candidate Sourcing

Candidate Screening

Candidate Assessment

Interview Process

Offer Management and Onboarding

It will be interesting to delve into what application of AI – Machine Learning, Computer Vision, Deep Learning and NLP, etc., is solving problems in the above-mentioned stages of recruitment. We may not talk too much about Workforce Analytics/ Management or Employee Life Cycle post-joining to ensure we focus on the key aspect which is recruiting. Additionally, since Automation, Data Analytics, and AI are terms used on multiple occasions; we do not intend to define these terminologies as there is abundant information already available on the Internet.

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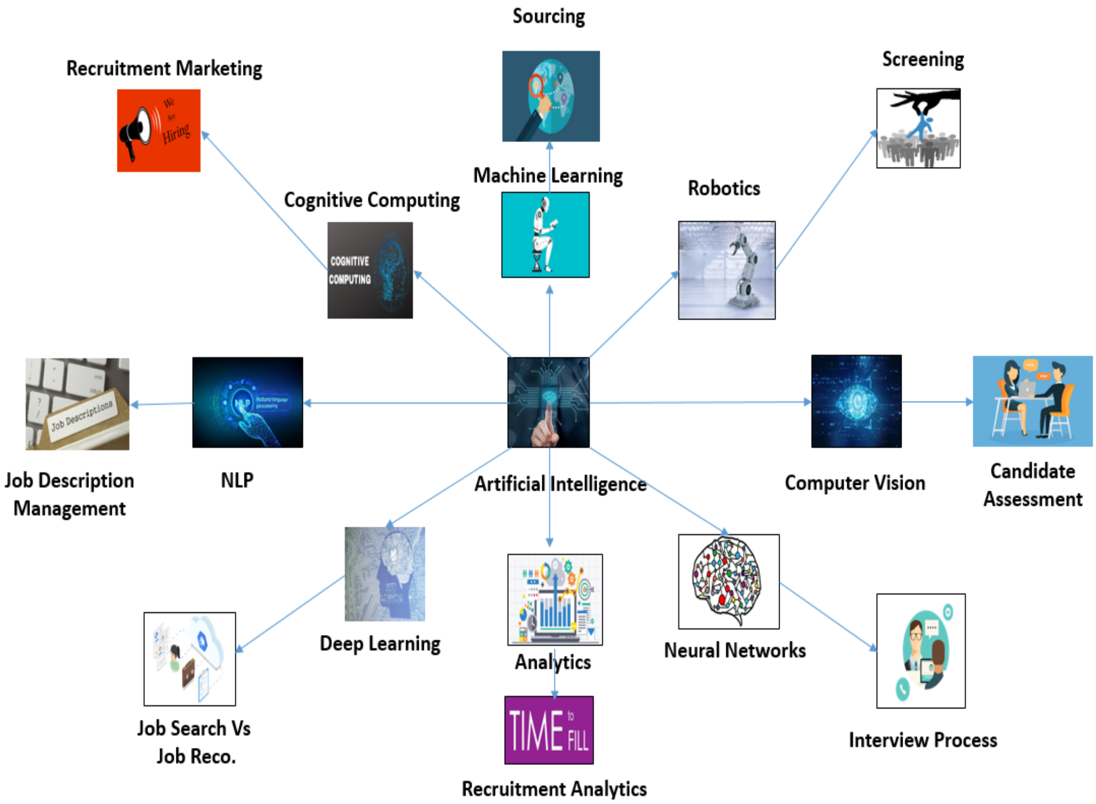

*Figure 1: **Talent Acquisition life cycle with AI algorithms***

AI used cases for HR

Chatbots for Assessment and Screening

Know Personality Insights

AI-based analysis of video interviews

Identify internal talent through Gamification

Applicant tracking systems

Bias-reduction tools

Job description Automation Tools

Comparisons of Internal and External Talent

Automatic responses and follow-up scheduling

Useful feedback to the rejected candidates

Candidate and Hiring Manager Satisfaction Automation

Gamified learning and development tools

Job AdWords Posting

Job descriptions are generally written by hiring leaders and may have few unconscious biases that may impact the receiving community which is applicants and may also seem that company is not inclusive at times the statement “we are looking for Design Super heroes” does not appeal to female applicants.

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TEXTIO is an Artificial intelligence embedded platform that can enable to review and enhance the content of the job description that is posted by recruiters. A tool that helps recruiters to improve the content of their postings. There are high chances that applicants will apply to jobs that are more appealing and gender-neutral. Textio uses Natural language processing and text analytics algorithms to enable more detailed job descriptions.

Candidate Sourcing

Sourcing process has dramatically changed over the years thanks to Artificial intelligence. Web search methods have completely changed owing to new generational portals, which gave birth in the last few years. Recruiters' day journey, which was only soaring through a few portals, has changed drastically as they started using social media for hiring. Hiring the resource at the right time and right cost and ensuring the candidate has the greater candidate experience is the utmost priority of the Talent acquisition team.

CONNECTIFIER can be considered as one of the best tools for finding excellent candidates and creating a database. Headhunting is the term associated when one tries to find specific talent in a specific market, and CONNECTIFIER can play a role there. Machine learning techniques are used in CONNECTIFIER as a backend algorithm.

ENTELO is a kind of platform where you can apply filters like ethnicity, gender, and veteran status and find relevant candidates. The algorithm used is NLP and predictive analytics. The best is to source passive candidates in Entelo and engage them to make them active and later an applicant. Entelo has been used by a few of the top technology product companies.

TALENTBIN is an applicant tracking system, and used to source passive candidates effectively. The algorithm used is Supervised/Unsupervised ML. From the social footprint of the candidate, TALENTBIN collects and presents to the recruiters. Some of the Top IT companies use this platform to get access to passive job seekers

HIRETUAL is powered by an Artificial intelligence candidate sourcing solution that enables organizations to find the talents faster with greater quality. The machine learning algorithm is used as a backend technology in Hiretual. While it claims to find, engage, and hire the right people 10x faster. Web Integration using robotics is the best part of this tool.

BEAMERY uses Predictive analytics and Natural language processing to enable candidate engagement and relationships. It basically becomes an interface between candidates and employers to identify top talent and build a relationship between them. Few High-Tech companies are using Beamery and feel that this is a great platform.

ARYA is primarily used by corporate recruiters, RPOs, and staffing firms to source great quality candidates, and the same platform can also be used to engage the candidates. Arya believes in the concept of AI with a human touch and enables constant learning on the product offering. Natural language processing and Machine learning are the two algorithms used by Arya

There are many more tools that offer similar applications with minor technological differences. The list goes as, TEAMABLE, TALEMETRY, HIREABBY, HIREDSCORE, ROLEPOINT, AVATURE, etc.,

Candidate Screening

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In the recruiting process, once the resume sourcing activity is done then we move to screening which often is a tedious task as we have tons of resumes, and one must go through each of these resumes and shortlist the best ones. Resume screening tools come in handy, which use machine learning, Deep and reinforced learning, and several other techniques. It is discussed that identifying a resource is as important as engaging them, and we will discuss engagement aspects in the next chapters.

CEIPAL claims to be an end-to-end recruiting system that can be a good applicant tracking system and can be integrated into a larger Human resources Management system. Aspects like scalability make this slightly different than other market players. They pretty much use Machine learning, NLP, and Deep learning algorithms in the product.

CVVIZ is an applicant tracking system that uses AI to help us hire faster. It is cost-effective and ensures quality hiring. The tool specialises in resume screening, video interviews, and recruitment analytics through Natural Language Processing which serves as the backbone of the Tool.

Apart from these tools, companies engage chatbots for various stages of screening candidates.

(Figure courtesy: HBR Research)

Candidate Assessment

It's okay to say now that companies are not choosing candidates, and candidates are choosing companies. It is important to ensure the candidate assessment process gets not only the best candidates but also the process is ethical and transparent. New generation assessment models not only help assess smartly but only leave a great candidate's experience.

CHATBOTs: Jobpal, Mya, and Olivia are one of the best chatbots which can be used both for sourcing and screening candidates. Scalability is very high and always enables good candidate experience. NLP, machine learning, and text analytics are being used to ensure that chatbots are very accurate.

HOLLA is a social and educational platform that connects the employee & the recruiter. The technology used is computer vision. It is a kind of video chat product that can be leveraged for Interview Assessments.

ARCTIC SHORES is a Games based assessment platform for psychometrics. Essentially allows the user to play a game and assess attributes that can help in the selection process. Siemens UK approached Arctic Shores to help them hire 600 apprentices in 2017, with an aim to improve the Assessment Centre pass rate of just 24% in 2016, raise female participation and enhance candidate ratings of the Siemens process. Arctic Shores derived a "Success Profile" - high performance attributes - for each role from the existing Siemens

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employee pool, filtering out bias. Candidates were then given a 'fit score' based on their match which resulted in a 65% increase in the Assessment Centre pass rate, from 24% to 40% (60% in some areas).

Interview Process
Interview process, in other words also referred to as the assessment process, is a very important step in recruitment where different parties meet and discuss the potential opportunity. From the candidate's point of view, while being assessed is also assessing the company. On the other hand, hiring managers are assessing the candidate fitment in terms of culture, Competence, and other organisational attributes. Technical and Behavioural assessment/interviews along with aspects like Facial expression, personality traits, and body language, are assessed as part of the overall hiring process.

CALENDY is an interesting product that is used by companies that manage the schedules of Hiring teams and candidates. This being AI-powered, open source easily integrated into Microsoft Outlook differentiates this product. The best part is it is very easy and quick with few alert systems embedded. Few tech companies have already started to use this, and this is also mobile-friendly.

INTERVIEW MOCHA is an Artificial intelligence-powered competence assessment platform. The platform can be used to assess technical and soft skills, and the technology architecture is built on neural networks and Machine learning. Large companies that deal with multiple competencies and huge hiring numbers can rely on this tool to enable qualitative assessment. Currently used by top Data processing companies

(Figure courtesy: Mcquaig)

Offer and onboarding Process
Chatbots can be deployed for quick query resolution and engagement, and gamified way of onboarding is a new way in the industry. Employees no longer are required to sit through a whole day of induction and the same is shared with them on mobile or Tab format, and playing a logical game will enable info about the company, culture, vision, and HR policies.

ENBOARDER is an experience-driven Onboarding platform that transforms employee Onboarding into an ongoing, rich, and consistent experience at scale. It provides all the tools necessary for organizations to maximize employee engagement through machine learning.

TALMUNDO enables a 360-degree view of the organization and enables candidates to understand and engage in the company. Few researchers say that early attrition happens because there is no engagement in the initial few months of an employee. Through Chatbots, few engagement activities are initiated. The technology used is machine learning.

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SKILLATE has expertise in online learning. They provide all the tools and courses required for the employees of the organization, which can be leveraged at the time of Onboarding or in future employee life stages. It specialises in the mobile app, A.I. delivered microlearning, person-to-person author training, learning and development, talent management, training management systems, strategic training planning, and delivery system through the use of BIG ML.

TALLA is a great example of managing customer support, and it uses automated platforms to deliver this. It is a perfect sidekick for HR when onboarding employees. Talla uses an AI-powered assistant that provides contextually relevant answers on policies, procedures, benefits, and more. It saves everyone time and allows employees to find answers to their questions fast. For example, a new employee can ask Talla about the company vacation policies rather than spend time reading a vast employee manual or bothering HR. It leaves HR time to focus on more strategic activities. Customers include SAP, Botkeeper, Toast, IntelliCentrics, etc.

SABA, OPTIMUM HRIS, SIGNZY, are some more tools being used for onboarding employees in a better and smarter way.

Apart from utilising software for the various stages of talent acquisitions, campus recruitment with relationships and rapport with universities fetch better results. End-to-end products are also emerging and being employed for complete solutions of HRM, as discussed below.

ZWAYAM, NaukriRMS, HIREVUE, CALENDLY, X.AI, BELONG, and TalentRecruit are good examples of end-to-end recruitment solutions. They have embedded machine learning and Natural language processing algorithms to enable the recruiting process.

GLOAT is an interesting Platform that uses AI principles such as NLP and enables opportunities for job seekers. Match of Skills, qualifications, Career journey, and other features are considered to look for matching jobs and recommending jobs to prospective candidates. This Platform is already used in companies like Schneider Electric, and Unilever use this platform currently.

Research Design

With the above literature review it is evident that there are a lot of gaps, and it is important to have a maturity model for understanding the current usage of Artificial intelligence in each of the companies. The preliminary research and secondary research conducted for a short period of 1 month revealed that few companies are in the advanced stage of use of AI, and few of them are in the beginning stage. We used methods like surveys and personal meetings to arrive at a few inputs. Idea is to create a framework of maturity model which may look like below and have extensive questions and surveys to gather the data and analyze the maturity of the specific organization.

Stage	Name	Details
1	Enquiry and exploration	Ask Industry, find out details, research, discuss in forums and strategy meetings and think about moving in the Direction of AI.
2	Isolated	Use of Some parts of AI in some sub-functions and

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	experimentation	that to Pilot mode.
3	Coaction stage	Some sub-functions are Completely integrated 50% of the functions of talent acquisition and ready to look at Larger HR
4	Harmony stage	AI/ML/Robotics and Gamification across the HR and almost 70% of HR is Integrated
5	Symbiosis stage	Slowly moving towards Prediction and Prescription Mode with Heavy use of AI
6	Synergy stage	AI uses deep learning to recommend Human Resource activities.
7	Leveraging stage	AI recommends business opportunities using Market Intelligence which is integrated with the Internal AI Model.

A few findings/gaps identified:

1. Lots of Individual/off-the-shelf products are available, but they are not integrated. Ex Textio
2. A good number of End to end tools are available, but they are costly and not very much publicized. Ex Belong
3. Currently, there is no maturity model available for assessing the Use of AI
    1. For Process related stuff, we have PCMM and CMMI
    2. For the Maturity of Companies, we have Gartner Model

Why is Our HRAI Model Unique?

Seamlessness. The Pre-stage indicates the seamless entry into the AI drawing its strength from HR Analytics maturity. The research team's findings were that without strong and mature HR Analytics, the AI would be like a house built on sand; perhaps it will stand but after continuous interventions to make the analytics strong, leading to seesaw movements which would violate optimization. AHP also bears this out. We preferred to confine the model to two levels of AI-Assisted Intelligence (available today) and Augmented Intelligence (emerging) and depict that the model will transform into Autonomous Intelligence when another maturity model or a modification of the proposed model would have to be designed. Rooted in Optimization Theory and Mutual Benefit Theory – because it endeavors to optimize the introduction and execution of HRAI strategies that would lead to concurrent improvement of HR and business performance. Follows Mutual Benefit Theory which postulates that what is good for the people is good for the business and vice versa.

Balance and Flow vs. Discreteness. The figure will indicate the balance between flow and discreteness; for instance, some isolated experimentation would be part and parcel of Stage 1: Enquiry and Exploration, but merely isolated experimentation should not be construed as 'we have arrived.

Function Specific. The model is function-specific (HR specific) and can be applied to assess HRAI, which is the reason we have indicated specific levels of HR processes in each stage and also integration in percentage terms. It is applicable across sectors and businesses because the speed of adoption of HRAI would depend not only on the enthusiasm of the people but also on the resources that an organization can deploy. We used the analogy of a staircase to do this. If your staircase has steps of 6 inches, you will need more steps than if

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you had steps of 9 inches, but in the long run, both staircases will take you to your goal. By creating a 7-Stage model vs. a conventional 5-Stage model for other maturity models, we recognize that the speed of adoption would vary, but eventually, you will still reach the top. Hence larger lags in Table I.

The root to make our model SMART was to indicate the degree of adoption of AI in HR in terms of the degree of adoption of the HR functions and integrating these with the business for performance and an indicative time for each stage of the model.

The model has been kept simple and devoid of jargon such as ‘hype’ or threatening terms such as ‘chaotic stage.’ We tested the simplicity with a dozen HR experts and finally did Grandma’s test of explaining our model to a cohort of 16 undergraduate business students and asking them to explain whether they understood the model and what they understood. This confirmed the simplicity of the model, which is vital because the model is required to be explained to several stakeholders, familiar and not so familiar with AI.

Conclusion

The research in some way confirms that Artificial intelligence is making its way and enabling human resources; there are misconceptions among individuals that this future technology can take away jobs and recruiters may become redundant. A further issue is that the Algorithm may learn human bias, which could be a bigger challenge. It is understood that the penetration is not very high but that the beauty of any new technology and the companies who incubate this faster will have first mover advantage and enable the transformation in the industry. Not to ignore the statements made that AI could have bias and tools cannot think like human beings, but more investments and research will have some solution in the future.

Hiring velocity can be increased

When machines, basically chatbots, can be thought to screen candidates based on an algorithm, then the scale at which they can execute this task is way faster than the way humans can do this. With the additional inclusion of supervised learning and stuff, we can get efficiency at par with human efficiency.

Improving the quality of hire enables sourcing challans

We discussed sourcing being a tedious task and if we have a system that can not only help to source but also tell us which is the best channel to source for future roles which run on recommendation algorithms, then we are solving the quality of sourcing problem. There are some data points on how AI can be used in Sentiment Analysis, Personalized Employee Experience, and Cognitive Decision Making, but all of these are at an experimental stage.

There could be a few barriers like Talent Gap, Privacy Issues, Integration Issues, Limited Proven Intelligence, and Financial Barriers, which I think time will solve. Artificial Intelligence enables speed, quality, and greater experience. While it is easy to say AI is the Future, if we can bring good synergy between AI and humans, then that will solve problems in HR.

As discussed earlier during the literature review, the earlier focus was on a particular application; however, this paper discussed the availability of technologies, tools, and software platforms for customized requirements as well as for end-to-end solutions. With this background, it is affirmatively stated that AI is going to play a major role in HRM and HRIS.

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Basis the additional data gathering, we will pick up a sample size of 30 companies and analyze the maturity model of the company and also enable them to get into the next stage of maturity. In the basic research, it is understood that there are no maturity models to understand the use of AI in HR in an organisation. Also, this 7-stage model, which is self-created, can also become a framework or patent in the future.

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Appendix

Abbreviations

AI	Artificial Intelligence
HRM	Human Resource Management
ML	Machine Learning
TA	Talent Acquisitions
NLP	Natural Language Processing
CV	Computer Vision
RPA	Robotic Process Automation
CC	Cognitive Computing
HR	Human Resources
DL	Deep Learning

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Challenges to Customers Intention to Fully Adopt Digital Banking in Indian Banking Sectors

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Abstract
The banking landscape was driven by the adoption of technology. The penetration of technology in the Indian Banking Sector has resulted in reducing operating costs, enhancing the efficiency of operations, increasing profitability, improving service quality, and many more. However, the adoption of technology comes with several challenges. For the successful implementation of technology, a bank must be fully aware of the challenges obstructing the adoption of technology. Therefore, the study aims to evaluate and analyze the challenges faced by the Indian Banking Sector on the adoption of technology. For the purpose of the study a structured questionnaire was created, and data was collected through an online survey. PLS-SEM was used for the examination and analysis of data. The present study explains that customer intention to adopt digital banking is highly influenced by technological challenges i.e., technological readiness, technology security, bank support, and impersonalisation barriers. The research findings provide insight to the bank management in understanding and formulating the policies to overcome the challenges thereby pushing banks towards the successful application of technology in Indian Banks.

Keywords: Technology, Adoption, Challenges, Indian Banking Sector, PLS-SEM

1. Introduction

The world has witnessed rapid advancement in information technology over the last few years. The development of technology has been a boon to many industries, especially to the banking industry. The invasion of technology in the banking system has brought a paradigm shift in the banking industry popularly known as “Digital Banking”. The term “Digital banking” can be defined as the engagement of technology in the banking business to carry out banking transactions smoothly (Sardana & Singhania, 2018) through internet banking, credit card, debit card, digital wallets, mobile banking, automatic teller machine (Mansuri et al., 2021). Digital banking is one of the newest and most innovative technological break-through in the banking industry. Banks have to transform from traditional to digital models to keep up with the pace of development in the financial industry. Digital banking services have transformed the ways of conducting banking business by making it customer centric instead of business-centric (Ahmed & Sur, 2021).

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The integration of technology with the banking industry reaps a momentous benefit for the service providers as well as for the customers (Rootman & Krüger, 2020). The development of technology provides an effective way to maintain competitiveness within the banking industry (Ha & Nguyen, 2022; Olanrewaju, 2018), reduces operating costs (Ananda et al., 2020), reduces the cost of transactions (Roy et al., 2017), improve customer services (Martins et al., 2014), diminishes geographical constraints (Durkin et al., 2007), improve customer satisfaction (Bauer & Hein, 2006), enhance customer experiences (Ananda & Sonal, 2017), create loyalty among customers (Konalingam et al., 2017), build customer value (Mbama et al., 2018) and enhance the growth of the banking business (Fairooz & Wickramasinghe, 2019). In total, digital banking services are more economical and convenient than traditional branch-based banking services from customers' and bankers' perspectives (Alam et al., 2007).

The financial reforms in the 1990s paved the way for digital banking thereby pushing banking toward digital platforms. The first initiative towards digital banking in India emerged with the introduction of online banking by ICICI bank in 1996 (Dhananjay & Ch, 2015). Safeena et al., 2014 emphasized that to survive in the market almost all the banks in India were offering services of digital banking to their customers. With the growth of investment in technology, it's essential to understand the perspective of customers towards technology and design strategies accordingly (Kaur et al., 2021). The government of India, entrepreneurs, sectors, and societies have taken various initiatives to mitigate the customers towards digital platforms over the years (Schmidt-Jessa, 2022). “Demonetisation” in 2016 was a turning point for digital payments resulting in a sharp rise in the use of electronic money. Another major initiative taken by the government was the introduction of the “Digital India” project in 2019 to digitally empower every citizen of India and attain the chief position in the field of technology to improve health, education, and the banking system.

However, initiatives were multiplied and accelerated through the outbreak of the covid pandemic. Though customers have been using digital banking and payments for some time yet it’s not being used by everyone or for all financial facilities. Sreelakshmi & Prathap, 2020 state that initially customers were using digital banking as a medium of convenience, but it became essential due to covid-19 pandemic. The factors encouraging the usage of digital banking during the pandemic are: (a) digital banking is a platform that acts as a mechanism to promote social distancing to prevent the spread of the COVID-19 virus. (b) difficult in-branch banking during the pandemic. Thus, COVID-19 compelled customers to indulge in digital banking in India. The pandemic pushes the banks to become customer-centric, re-strategizing technologies and strengthening digital banking to ensure survival and retain existing customers.

The Reserve Bank of India has predicted that by 2021, digital banking in India will rise by four times. It was evidenced through the bulletin issued by the Reserve bank of India, 2021 stating that the overall volume of internet/mobile banking transactions between the year 2018-2021 has raised from 5270 to 44750 lakhs (Mathew & Sunil, 2022). Also, the Reserve Bank of India Vision report for 2019-202, aims at creating a “cash lite society” by encouraging every customer to have access to an affordable, fast, easy, stable, and safe digital payment system. The digital/mobile transactions have raised four-fold from 2018-2021 by 2069-8707 crores (Saxena, 2022). However, trends signify that the increase in digital banking is much ahead in developed countries than in emerging economies. In India, it was projected that digital banking will cross 150 million which was 12% of the Indian population by 2020 whereas countries like Britain, Nordic, UAE, and the USA have 76%, 80%, 90%, and 80% adoption of digital banking. Thus, it can be said that the process of customers opting for digital banking is sluggish (Chauhan et al., 2022).

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Therefore, this research is needed to bridge the gap in the literature to aid players in working towards the development of digital banking by delivering more varieties of consumer-friendly services to satisfy the existing customer and draw the attention of potential customers. It's a prerequisite to removing challenges to realize the full benefit of digital banking. Realizing this, the current research has the following objective: to identify the technological challenges faced by customers of Indian Banks.
The research questions addressed in the study is:
What are the technological challenges faced by customers of Indian Banks?
The paper is constructed in six sections. Section one gives a background of the study followed by a brief discussion of the key challenges of digital banking to customers along with the hypothesis developed. The third section enlightens the methodology used in the study. Results and discussion were detailed in section four. Lastly, section five presents the conclusion, limitations, and implications.

2. Conceptual Framework and Hypothesis Development

2.1 Technological Readiness

Customer technological readiness should be considered to estimate the perception and behavior of customers toward technology (Lin & Hsieh, 2006). Parasuraman, 2000 defines technological readiness as "people's propensity to embrace and use new technologies for accomplishing goals in home life and at work". Technological readiness comprises four dimensions namely discomfort, insecurity, optimism, and innovativeness (Blut & Wang, 2020). Discomfort and insecurity signify 'inhibitors' indicating lower technological readiness while optimism and innovativeness signify 'motivators' indicating contribution towards technological readiness (Parasuraman & Colby, 2015).
The quality of the internet connection used by customers to access digital banking plays a significant factor in deciding customer intention toward digital banking (Chauhan et al., 2022). Talukder, 2018 emphasized that factors discouraging digital banking are: the inability to access the internet; the unsecured environment, and the lack of internet access. Computer self-efficacy is another essential variable to influence customer intention to adopt digital banking (Chauhan et al., 2022). Self-efficacy visualizes the intention to utilize a wide range of technologically innovative services (Hill et al., 1986). Therefore, the following hypothesis is developed:
H1: Technological readiness has a significant influence on customer intention to use digital banking.

2.2 Technology Security

Johnson et al., 2018 define privacy as "the ability of individuals to have control over their own private information". Privacy includes customer concerns about losing control over provided and required personal information while conducting digital banking transactions (Al-Sharafi, 2016). The protection of personal information is essential to enhance trust in digital banking (Al-Sharafi, 2016). Shankar et al., 2020 state that privacy risk is closely linked to security risk. Salisbury et al., 2001 define perceived security as "the extent to which one believes that the web is secure to transmit sensitive information". Security concern is one of the significant reasons behind customer resistance to adopting digital banking (Bhatt & Bhatt, 2016). The security issues can be minimized by banks and other financial institutions by building trust and confidence in digital banking services (Musav & Yousoof, 2015).
Marek et al., 2012 define trust as "the belief that allows individuals to willingly become vulnerable to the bank, the telecommunication provider, and the mobile technology after having the banks, and the telecommunication provider's characteristic embedded in the technology artifact". Previous studies emphasized that trust, security, and privacy have a

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positive relationship with customer intention (Kim, 2009; Shiau & Luo, 2012; Alalwan, 2017; Howcroft et al., 2002; Subashini & Kavitha, 2011; Sharma et al., 2018; Reichheld & Schefter, 2000; Musav & Yousoof, 2015; Ananda et al., 2020). Therefore, the following hypothesis is developed:

H2: Technological security has a significant influence on customer intention to use digital banking.

2.3 Bank Support

Insufficiency of secured and reliable information discourages clients from exploiting the services of digital banking (Sattar & Rahman, 2013). Qiu, 2009 emphasized that customers, especially the older generation, were reluctant toward using digital banking services in absence of appropriate support from employees at the bank. Lack of assistance offered by the establishments towards familiarising customers with digital banking acts as a barrier, in spite of having access to the technology (Azad & Islam, 1997). Therefore, the following hypothesis is developed:

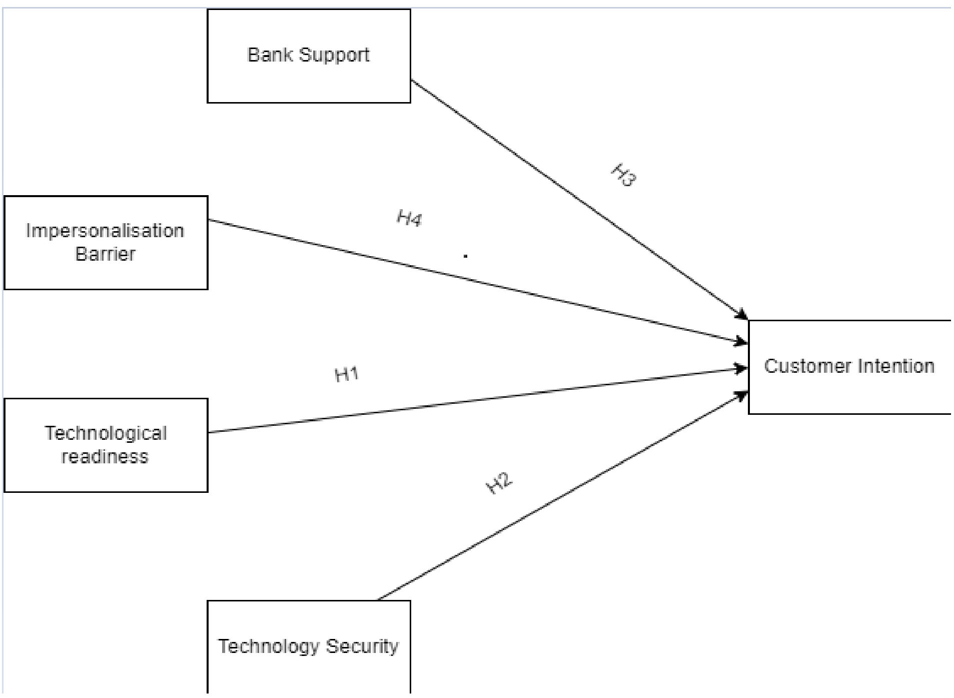
H3: Bank support has a significant influence on customer intention to use digital banking.

2.4 Impersonalisation Barrier

Yang et al., 2015 emphasized that the concept of impersonalisation barrier is akin to service risk. According to Lopez-Nicolas & Molina-Castillo, 2008 service risk is defined as service risk as "The probability that the firm will not offer a good service in the future". The impersonalisation barrier is related to the lack of face-to-face communication in the context of digital banking (Dimitrova et al., 2021). Shin, 2021; Martins et al2014 emphasized that customers, especially the older generation, were reluctant toward using digital banking services compared to the younger generation. They encounter difficulties in adopting innovative technologies. Therefore, traditional banking is preferred over digital banking by the older generation (Jimenez & Diaz, 2019). The difference in the opinion of the younger and older generation leads to the development of the following hypothesis:

H4: Impersonalisation barriers have a significant influence on customer intention to use digital banking.

Figure 1 Proposed Model



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Source:SmartPLS 4

3. Methodology

3.1 Questionnaire Development

An online survey was conducted by designing a structured close-ended questionnaire comprising two segments to collect primary data. Section one emphasizes the demographic profile of the respondent i.e., gender, age, qualifications, and employment status while section two comprises 12 items that measure various constructs related to the model to establish relationships among them.

3.2 Data Collected

The questionnaire was distributed to the customers of banks through email. A total of 230 valid questionnaires were collected from the study population. As the data was collected through online mode, questionnaires with incomplete information were eradicated. The demographics data depicts that out of 230 respondents, 122 (53.04%) were male and 108 (46.96%) were female with a maximum from the age group between 26-45 and 46-60. Among the respondents, a large proportion of the participants were non-technical graduates and postgraduates employed in the private sector. Some of the participants were operating their own businesses. The respondent demographic respondents are summarized in Table 1.

Table 1 Respondent Demographics

Demographics Factors	Categories	Number	Percentage
Age	>20	40	17.39%
	21-40	85	36.96%
	41-60	65	28.26%
	60<	40	17.39%
Gender	Female	122	53.04%
	Male	108	46.96%
Qualification	>=10	25	10.87%
	12^{th}	12	5.22%
	Graduate (Technical)	32	13.91%
	Graduate (Non-Technical)	62	26.96%
	Post Graduate (Technical)	28	12.17%
	Post Graduate (Non-Technical)	71	30.87%
	Higher Degree	0	0
Occupation	Students	12	5.22%
	Private Sector Employees	75	32.61%
	Government Employees	20	8.70%

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	Business	45	19.57%
	Retired	20	8.70%
	Housewife	32	13.91%
	NRI	1	0.43%
	Agriculture	10	4.35%
	Defence Forces	5	2.17%
	Others	10	4.35%

Source: Author Creation

3.3 Measurement Scales

A structural questionnaire was adopted to measure 12 items using a 5-point Likert Scale stretching from “Strongly Agree” to “Strongly Disagree”. The theoretical model based on existing literature was created as shown in Table 2. In the theoretical model, Customer intention was treated as a dependent variable whereas Technological readiness, Technology security, Bank support, Technology characteristics, and Impersonalisation barrier were independent variables. The items were adopted from the existing literature to ensure content validity (Foroughi et al., 2019).

Table 2 Measurement Items

Constructs	Items	Sources
Technological Readiness	3	Chauhan et al., 2022; Talukder, 2018; Hill et al., 1986
Technology Security	4	Ananda et al., 2020; Kim, 2009; Reichheld & Schefter, 2000
Bank Support	2	Sattar & Rahman, 2013; Qiu, 2009
Impersonalisation Barrier	2	Shin, 2021; Martins et al., 2014; Yang et al., 2015

Source: Author Creation

3.4 Common Method Bias

Common Method Bias is defined as “a systematic error variance that stems from a common method used to measure the constructs of the study” (Kock et al., 2021). The Biasness occurs when both the dependent and independent variables are measured within the single survey using the single response method. Kock & Lynn, 2012 suggest the examination of Variance Inflation Factors (VIFs) for the assessment of collinearity and common method variance of the model. Kock, 2015 states that if the value of all VIF in the inner model is more than 3.3, then the model is said to be contaminated with pathological collinearity and common method variance whereas if the value of all VIF in the inner model ≤ 3.3, than the model, is said to be free from the collinearity and common method biases. In the current research, the occurrence of all VIF in the inner model is less than 3.3, hence, collinearity and common method variance are not the issues (Table 3).

Table 3 Common Method Bias

	BS	I	IB	TR	TS
BS		1.581			
I					
IB		2.910			
TR		2.667			
TS		1.827			

Source: SmartPLS 4

3.5 Analysis of Data

To test the hypothesis developed, partial least square structural equation modeling (PLS-SEM) was carried out using SmartPLS 4 software (Chin, 2010; Foroughi et al., 2019). PLS-SEM was preferred over other structural models such as the variance-based approach and covariance-based approach due to the following reasons: (a) provides a solution with a small sample size having a large no of constructs and items (Hair, 2014); (b) pls-sem can easily handle non normal data by transforming the data as per the central limit theorem (Cassel et al., 1999); (c) pls -semen easily handle complex models (Siyal, 2019); and (d) pls-sem also proves valuable for analyzing secondary data (Hair et al., 2019). PLS-SEM is a two-step methodology involving the evaluation of the outer or measurement model followed by the evaluation of the inner or structural model (Hussain et al., 2018).

4. Empirical Results

4.1 Measurement Model

Shumueli et al., 2019 emphasized that the analysis is initiated with the examination of the model also known as the outer model. The model is designed to estimate reliability, consistency, convergent, and discriminant validity (Hussain et al., 2018). The indicator reliability is the square value of the outer loading of the items (Jahan & Shahria, 2021). The reliability of the model was estimated using composite reliability (CR) (Daragmeh et al., 2021) and Cronbach's α (Sreelakshmi & Prathap, 2020). A value of 0.70 and above of CR and Cronbach's α is preferred (Ringle et al., 2020) while a value ≥0.5 is acceptable (Wong, 2013). The values of CR (Table 4) were over the desirable range, confirming that the measurement model is reliable.

The consistency of the model was evaluated through Cronbach's α (Hussain et al., 2018). Yet the use of Cronbach's α in PLS-SEM was criticized due to the metric assuming a common factor model (Sarstedt et al., 2022). As Cronbach α underestimates the value of internal consistency, various literature such as Jahan & Shahria, 2021; Wong, 2013; Hair et al., 2013 suggests that internal consistency can be better measured using composite reliability. The desirable value of CR and Cronbach's α of ≥0.70 is preferred (Ringle et al., 2020) while a value ≥0.5 is acceptable (Wong, 2013). The values of internal consistency (Table 4) were over the desirable range, confirming that the measurement model is consistent.

Convergent validity was assessed using CR and average variance extracted (AVE) (Sreelakshmi & Prathap, 2020). It was recommended that to estimate convergent validity, the value of composite reliability should surpass 0.70 (Henseler et al., 2009) whereas AVE should surpass 0.50 (Fornell & Larcker, 1981). Chin, 1998 states that if AVE is over 0.50, then it can be said that the construct explains at least 50 percent of item variance. Table 4 demonstrates that the values of AVE and composite reliability were over the desirable limit, thus confirming sufficient convergent validity.

Discriminant validity is one of the essential features of validity assessment as it ensures that each construct is analytically unique and captures the phenomenon that other constructs are not able to represent (Sarstedt et al., 2022; Franke & Sarstedt, 2019). Discriminant validity was assessed using Heterotrait-monotrait (HTMT) ratio (Henseler et al., 2015), Cross-loading, and Fornell-Lacker criterion (Fornell & Larcker, 1981). Fornell-Lacker criterion and Cross-loading are the most frequently used criteria to measure discriminant validity. However, both criteria poorly disclose discriminant validity due to low sensitivity. Thus, Henseler et al., 2015 recommend the HTMT ratio of correlations to estimate discriminant validity (Ringle et al., 2020). The threshold value of the HTMT ratio to estimate discriminant validity is 0.85 for distinct constructs and 0.90 for similar constructs (Henseler et al., 2015).

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Table 5 demonstrates that the values of the HTMT ratio do not exceed the threshold limit, thus confirming that discriminant validity is established.

Table 4 Consistency, Reliability, and Convergent validity

Constructs	Items	Cronbach's α	AVE	CR
Technological Readiness	TR1 TR2 TR3	0.836	0.755	0.836
Technology Security	TS1 TS2 TS3 TS4	0.700	0.567	0.700
Bank Support	BS1 BS2	0.893	0.889	0.893
Impersonalisation Barrier	IB1 IB2	0.918	0.924	0.918
Customer Intention	I1	1.000	1.000	1.000

Source: SmartPLS 4

Table 5 HTMT Ratio

	BS	I	IB	TR	TS
BS					
I	0.104				
IB	0.449	0.804			
TR	0.542	0.670	0.873		
TS	0.733	0.500	0.635	0.564	

Source: SmartPLS 4

4.2 Structural Model or Inner Model

Followed by the measurement model, the research hypothesis was tested using the structural model. Hair *et al*., 2014 state that the variance (R^2), effect size (f^2), t-values, and path coefficient (β) are the significant criteria to evaluate the inner model.

4.2.1 Estimating the value of Variance (R^2)

The value of variance (R^2) for the inner model was 0.705. The value of R^2 depicts 70.5% of the variation in challenges to customer intention to fully adopt digital banking. A value of R^2 equal to 0.75 is considered "substantial", a value of R^2 equal to 0.50 is considered "moderate" and a value of R^2 equal to 0.26 is considered "poor" (Henseler et al., 2009). Thus, the value of the variance of customer intention to adopt digital banking is moderate. This demonstrates that a 69.5% change in "customer intention" to adopt technology can be accounted to technology readiness, technology security, bank support, and personalization barrier.

4.2.2 Estimating the Effect Size (f^2)

f^2 is measured to estimate the strength of correlation between the exogenous constructs (Daragmeh et al., 2021). Hair et al., 2013 and Hair et al, 2011 state that the value of f^2 equal to 0.35 depicts a "strong effect size", the value of f^2 equal to 0.15 depicts a "moderate effect size" and value of f^2 equal to 0.02 depicts "weak effect size". Table 8 indicates the effect size of the latent constructs. The table depicts that the Impersonalisation barrier has a strong effect size with a value more than equal to 0.35 whereas Bank support has a moderate effect size with a value more than equal to 0.15. Technology security and Technology readiness have a weak size with a value of more than equal to 0.02.

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Table 6 Effect Size Analysis

Constructs	Effect Size	Status
Technological readiness	0.041	Weak
Technology Security	0.062	Weak
Bank Support	0.265	Moderate
Impersonalisation Barrier	0.487	Strong

Source: SmartPLS 4

4.2.3. Estimating Path Coefficient (β)

Hair et al2016 suggests using a full bootstrapping procedure with 500 sub-samples and a significance level of 0.05 to estimate path coefficient (β). The results of the hypothesis were demonstrated in Table 6. The study has validated and confirmed all the hypotheses developed. Consumer intention to adopt digital banking was jointly predicted by technological readiness, technology security, bank support, technology characteristics, and i'm-personalization barrier. The β reveals that technology readiness has significantly impacted consumer intention to adopt digital banking (t value = 2.321; β = 0.187 and significant p-value < 0.005), confirming H1. Technology security has positively impacted consumer intention to adopt digital banking (t value = 2.461; β = 0.189 and significant p-value < 0.005), confirming H2. Bank support has positively and significantly impacted consumer intention to adopt digital banking (t value = 4.637; β = -0.365 and significant p-value < 0.005), confirming H3. Finally, the impersonalisation barrier has positively impacted consumer intention to adopt digital banking (t value = 8.843; β = 0.672 and significant p-value < 0.005), confirming H4.

Table 7 Results of Hypothesis Testing

Hypothesis	Standard Deviation (SD)	Sample Mean (M)	Beta (β)	t-values	p-value	Status
Technological Readiness▼ Customer Intention	0.081	0.178	0.187	2.321	0.020	Accepted
Technology Security ▼ Customer Intention	0.077	0.178	0.189	2.461	0.014	Accepted
Bank Support ▼ Customer Intention	0.079	-0.337	-0.365	4.637	0.000	Accepted
Impersonalisation Barrier▼ Customer Intention	0.076	0.663	0.672	8.843	0.000	Accepted

Source: SmartPLS 4

5. Discussion

5.1 Findings and Conclusion

The present study explains that customer intention to adopt digital banking is highly influenced by technological challenges i.e., technological readiness, technology security, bank support, and impersonalisation barriers. The result of the study emphasized that impersonalisation barrier has emerged as a major challenge with β of 0.672 (Table 7) toward customer intention. The beta value reflects that impersonalisation barrier plays an important role in influencing consumer intention to adopt digital banking. Impersonalisation barriers were succeeded by technology security and readiness with a beta value of 0.189 and 0.187

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respectively. However, bank support in Table 7 shows that it has a significantly negative relationship with customer intention to adopt digital banking.

The effect of demographic details of respondents towards customer intention to adopt digital banking isn’t statistically significant indicating that respondents were heterogeneous in their personal and professional backgrounds. The estimated value of variance r^2 is 0.695. The value of r^2 emphasized that a 69.5% change in “customer intention” to adopt technology can be accounted for technology readiness, technology security, bank support, and personalization barrier. To better explain the value of variance in consumer intention to adopt digital banking, there is a need to explore additional factors. Further study also emphasized that the statistical analysis supports all the hypotheses proposed in table 7.

5.2 Implications

The present research significantly contributes to the prevailing knowledge involving digital banking by studying the most critical barriers impacting the intention to adopt digital banking in Indian Banking by customers. From the results of the study, it may be noted that the impersonalisation barrier has emerged as a major obstacle in digital banking adoption among customers. The banking industry should acknowledge that addressing the issue can decrease the resistance towards digital banking. The bank managers should work forward towards offering multiple solutions to avoid customer resistance to technological innovation.

Another essential obstacle impacting the adoption of digital banking is bank support. Qiu, 2009 emphasized that customers, especially the older generation, were reluctant toward using digital banking services in absence of appropriate support from employees at the bank. Hence, banks should extend support to customers, especially the older group regarding the usage of digital banking and respond from banks on complaints lodged by customers against problems faced by customers regarding digital technologies.

Technological security also has a significant and positive impact on the adoption of digital banking. Hence, banks need to build the trust of customers by providing them personalized banking services. Further, technological readiness also has a significant and positive impact on the adoption of digital banking. Hence, banks should educate customers about the usage of digital banking. To create awareness banks should conduct a series of educational campaigns on the usage of digital banking.

The results are especially significant for bank managers in understanding and formulating the policies to overcome the challenges thereby pushing banks toward the successful implementation of technology in the Indian Banking Sector. Digital banking has essentially contributed to restructuring the banking industry thereby enhancing adoption at an alarming rate.

5.3 Limitations and Future Scope of Study

Although the study proposes numerous theoretical and practical implications to the managers and researchers related to digital banking, it’s most important to acknowledge the limitations which may lead to the future agenda for research. Firstly, the results of the study cannot be generalized for the entire country as the sample size taken isn’t large enough, as India is a huge country with the second largest population in the world. Secondly, the research didn’t cover all the challenges influencing consumer intention to adopt digital banking. Hence, in the future remaining challenges can be considered. Thirdly, the present research applied Structural Equation Modeling, a linear in-nature approach (Daragmeh et al., 2021). Thus, in the direction of future research, the researcher can integrate linear techniques (e.g., multivariate analysis and SEM) and nonlinear tools (fuzzy set, support vector machine, and artificial neural network) to provide better insights related to digital banking. Lastly, the current model explains 69.5% variance indicating that in the future researchers can include additional challenges to better explain the variance. The proposed model is a systematic attempt in this direction to explore consumer intention to adopt digital banking and can form the basis for future empirical studies.

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An Enquiry of School Teachers Post Pandemic COVID-19 Psychosomatic Effect

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Background
Schools in India have been closed since March 2020 to prevent the spread of COVID-19 in India, causing uncertainty in the teaching and learning mechanism. Teachers from junior high schools and colleges are cornered to use online learning mechanisms. The covid-19 pandemic has affected the mental stability of scientists and teachers. And further, it created stress for both students and teachers. This constant stress increased the psychosomatic effects on junior and senior high school teachers. This study is an effort to investigate the psychosomatic effects on teachers in the region namely Nagpur, Maharashtra, India.

Research target
A sample size of 840 teachers were selected to conduct this research and were provided with a web-based questionnaire. A structured questionnaire linked to measures of worry, analysis of depression, anxiety and socio-demographic data. Variables such as gender, level of education, age, job stability, etc. were used. The result shows a high influence of psychosomatic influences on the psychological stability of teachers in the given region. In order to accurately determine the damage caused, a basic analysis of the parameters was carried out.

Discussion
During the analysis, it was found that the payment of wages remains only a variable factor according to the type of organization. Thanks to the sovereignty of state organizations, they provide their employees with a regular salary. But due to the COVID-19 pandemic, all economic operations have faced problems. therefore, the financial conditions of each government worsened. As a result, government teachers also suffered from the threat of salary pastures.

Results
The results of this study confirmed that a high percentage of teachers suffered from symptoms of hysteria, stress, and depression after the reopening of faculties and universities.
Findings: At the beginning of the new academic year 2020-2021, members of the teaching profession experienced psychological discomfort. This symptomatology was found to be higher in women than in men, but contrary to our expectations, it was higher in the elderly and in infant and primary education teachers. It has been observed that people with job instability suffer mainly from psychological symptoms.

Keywords: Psychosomatic Effect, Depression, COVID-19, and Depression.

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COVID Impact on Critical Technologies

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Keywords: COVID, Critical Technologies, Oxygen Concentrators, Psychological Impact, Socio-economic

Abstract

COVID-19 has influenced the whole world to innovate and develop new technologies. These technologies have played a pivotal role in saving the lives of many from the critical illness, ensured improved comfort levels of users and ensured sustainability of economic sectors, as far as business is considered. Till date in India around 72,000 startup companies have evolved based on novel and critical technologies, post COVID lockdowns. However, it is required to understand the driving motive for such developments and assess the technologies for their sustainability. This paper discusses factors influencing and the importance of critical technologies, their acceptance, rejection and psychological impact among people and end users. This paper also discusses a preliminary research and its results about socio-economic and psychological impact of Oxygen concentrators.

Introduction and Background work

COVID-19, though it is a pandemic to mankind, has inspired many, in fact the whole world, to innovative thinking, develop new technologies and venture into self sustainability. This change and explorative movement lead to establishment of start-ups and prospering of novel technologies. Maria-Elena (2015) has stated that people have exhibited different kind behaviour when it comes to acceptance or rejection of novel technologies. She has also introduced "Technophilia- acceptance of technology and Technophobia – reluctance to accept new technology".

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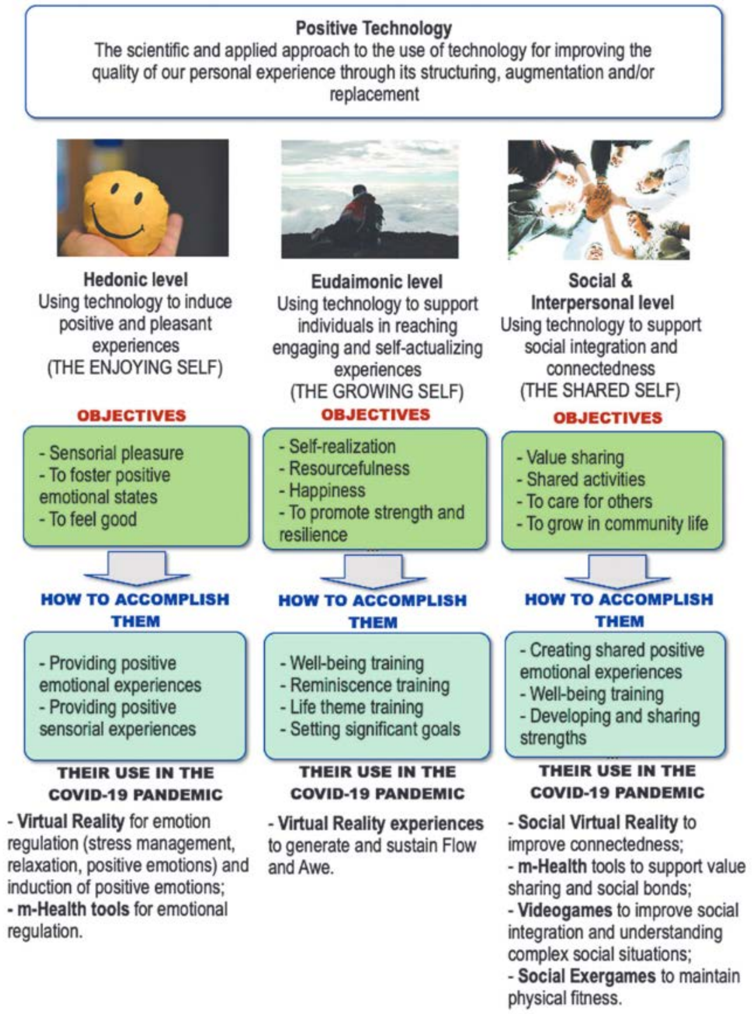

Fig 1: Strategy of positive technologies during COVID-19, Giuseppa et al (2020)

Giuseppa et al. (2020) have studied and introduced a concept called “Positive Technology” which will have a high impact on people to influence the acceptance of novel technologies. Fig 1 describes the potential of positive technologies and their objective, which have an impact on the psychology of the users. They have also stated that these positive technologies will be successful based on the factors viz., Emotional quality, engagement and actualisation and connectedness. Maria-elena (2015) has described how people have become addicted to IOT and gaming due to certain criteria of comfort. However, she has quoted a strategy based on which people either accept or reject a technology.

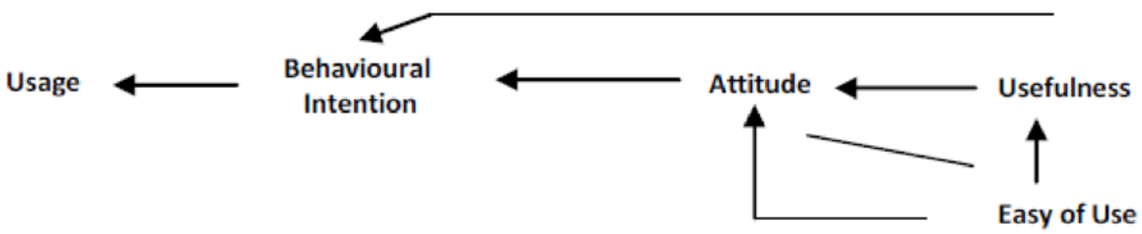

Fig 2: Technology acceptance model, as quoted by Maria-Elena (2015)

As shown in the fig 5, a technology is accepted based on the criterion of easy to use, usefulness which depends on the attitude of the individual and intention of usage. Further this article discusses the factors for “technophilia”and “technophobia”. Giuseppa et al (2020), though, have discussed the factors influencing the positive technologies. It is also suggested

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that novel technologies should be developed and implemented immediately to reach to the people and serve the purpose, else the rejection may have to be faced by the technologies. Strumsky et al (2015) have published their work on the methods to identify novelty in new technologies. They have also discussed the concepts called "Technological novelty taxonomy" and "de novo" creation to identify the technological capabilities of technologies and importance of reusing them to lead to innovations.

Pezzoni et al (2021) have focused in their discussion to estimate the life of novel technologies and their derivatives. In this study the authors have considered more than 10,000 "trajectories" or derivatives to estimate the take off time impact of technologies. The authors have devised a method of assessing patents to understand the technological impact and fixed a threshold value to be considered. They have considered the patents of new technologies during the period of 1985 to 2015, which lead to more than 10,000 technologies and more than 2,00,000 derivatives of technologies. The study summarises that the results shown are the technologies with the highest impact factor with longer take off time. The limitations of this research are that the patent data did not cover all the technologies and they followed only the "Combinational approach" but not the "de novo creation of technological capabilities".

Daily newspaper, Times of India dated 13th May 2022, has fetched an article stating "New one-shot drug to cut breast cancer treatment time by 90%". This article has concluded that such novel technologies will have high impact among the people as they are directly impacting on the cause and usefulness. Another article in Times Of India, dated 14th May 2022, has stated that "CCMB scientists develop India's first mRNA vax tech" to deal with CORONA as well other infections. This article also concludes that such novel technologies are much needed for the society and which has economical impact as well without compromising on the psychological impact.

In view of the above literature survey, it is found that studies were conducted about the requirement of critical technologies and their applications, but they did not focus on how these technologies are reaching the end users and how much awareness is required to ensure the real impact of such technologies. Hence the successive sections have discussed identification of a critical technology and the methodology applied for the survey. Results and discussion section gives a detailed insight about the missing link in the life cycle of the technology / product.

Methodology and Strategy

To understand the impact of a critical technology, it is utmost important to study the awareness among users, utilisation and satisfaction by the users, cost effectiveness and reachability to the needy. In view of the above factors, one of the effective devices is proposed to study and in this case Oxygen Concentrator is considered as it has made its impact during the last wave of COVID pandemic. The strategy and methodology planned to apply is a mixed technique, i.e., combination of qualitative and quantitative techniques through surveys and discussions. However, in this paper it is restricted to publish the survey summary. The author has conducted a survey by using questionnaires and circulated among a limited population of students, home makers and professionals within GITAM schools across 3 campuses, through WhatsApp. The main objective of this study is to understand how much the Oxygen concentrator has created the impact during the pandemic and the following questionnaire is considered:

1. Gender (Descriptive)
2. Age (in the rages of 20-30, 31-40, 41-50, 50 and above)
3. Did you use it (Yes / No)
4. Its utility performance (On a scale of 1 – 10)
5. Comfort to use (On a scale of 1-10)

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6. Does it need improvements (On a scale of 1-10)
7. Your prediction about its future requirement to the society (On a scale of 1-10)
8. Is it worth buying (On a scale of 1-10)
9. How much reachable to the needy (On a scale of 1-10)
10. How much profit making technology, is it (On a scale of 1-10)
11. Does it need awareness to publicise (On a scale of 1-10)
12. Any other comments (Descriptive)

The above samples were analysed and assessed by using Microsoft Excel and SPSS software and results are presented in the next section.

Results and Discussions

The data collected and results are presented and discussed in this section. As mentioned in the previous section, the summary of the data is given in table 1. Here the null hypotheses are that the respondents are not aware of such critical technologies but their utility is well known. It is also to be considered that these devices are economical and effective. Based on these null hypotheses the assessment is carried out. The data is collected from the genders neutral and in the age range of 20 to 60 years. From the table it is seen that most of the respondents are not aware of the utility of this device. Out of the questionnaire the descriptive data is not presented here to focus on quantitative data. The data clearly shows that some of the questions were not answered by the respondents, due to the non-availability of the devices and awareness.

Gender	Age in the range of	Its utility perfor mance	Comf ort to use	Does it need improve ments	Your prediction about its future requirement to the society	Is it worth buying	How much reachabl e to the needy	How much profit making technology, is it	Does it need awareness to publicise
Male	31-40	5	5	5	6	5	5	5	5
Male	41-50				6	6	3		8
Male	41-50	9	9	6	8	6	4	8	7
Female	31-40	6	8	7	8	8	8	8	9
Female	31-40	6	7	4	10	6	5	9	9
Male	41-50	10	8	4	8	10	4	8	9
Female	31-40				8	9			10
Male	41-50	9	9	6	8	6	3	8	9
Male	41-50	6	6	9	8	9	4	7	9
Female	20-30	6	7	10	10	10	6	8	4
Female	31-40	8	8	7	8	6	6	7	9
Male	31-40	7	7	9	10	7	5	8	10
Male	41-50	9	8	8	10	8	7	7	9
Male	20-30	7	7	9	8	5	4	7	8
Male	41-50	10	10	1	10	10	10	10	10
Male	20-30	9	9	10	8	7	9	9	10
Female	51-60	6	6	6	6	6	9	9	7
Male	31-40	9	9		10				8
Male	41-50	10	10	10	10	10	10	10	10
Male	20-30	6	6	5	8	7	6	7	7

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Male	31-40	9	8	7	10	10	3	10	7
Male	41-50	10	10	2	10	10	10	10	6
Male	41-50	10	8	8	10	8	8	10	10

Table 1: Collected data from the respondents, Ganapuram Venu (2022)

From table 1, from the general observation, it is evident that the respondents have not expressed their views when it comes to comfort to use, reachability and profit making. Majority of the respondents are male compared to females.

Gender	Female	5	25.0%
	Male	15	75.0%
Age in the range of	20-30	4	20.0%
	31-40	6	30.0%
	41-50	9	45.0%
	51-60	1	5.0%
Valid		20	100.0%
Missing		3	
Total		23	

Table 2: Case processing summary, Ganapuram Venu (2022)

The total number of samples from the population is 23, however 20 samples are valid and 3 samples are missing. It is evident from table 2 that 75% of total samples are from male and the remaining are female. Majority of the samples are from 41-50 years of age and minimum most samples are from 51-60 years of age.

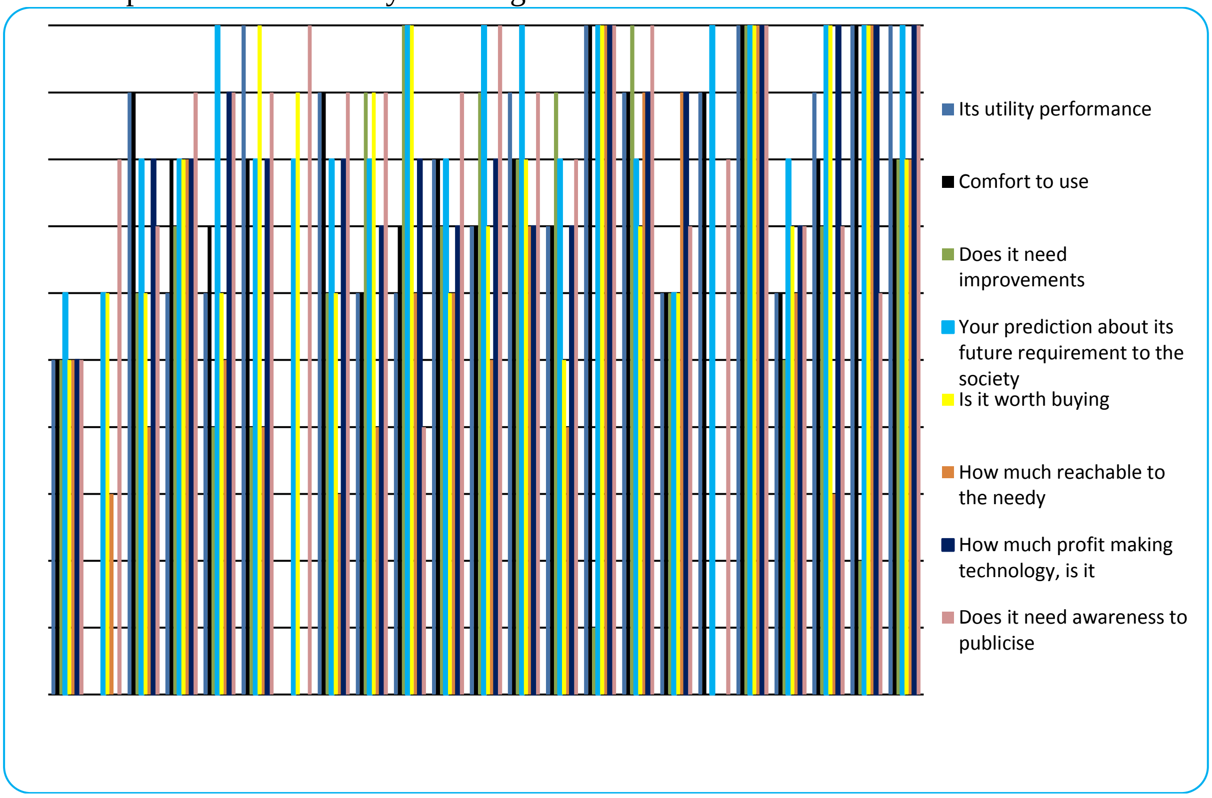

Fig 3: Results summary by using MS xls, Ganapuram Venu (2022)

Fig 3 shows that most of the respondents have said that such critical technologies need awareness from the age group of 41-50 and male. It is also stated that the future requirement of this device is high. People could not rate high for the comfort to use, as it may be due to non availability of such devices to the people, shown by the rating for the reachability.

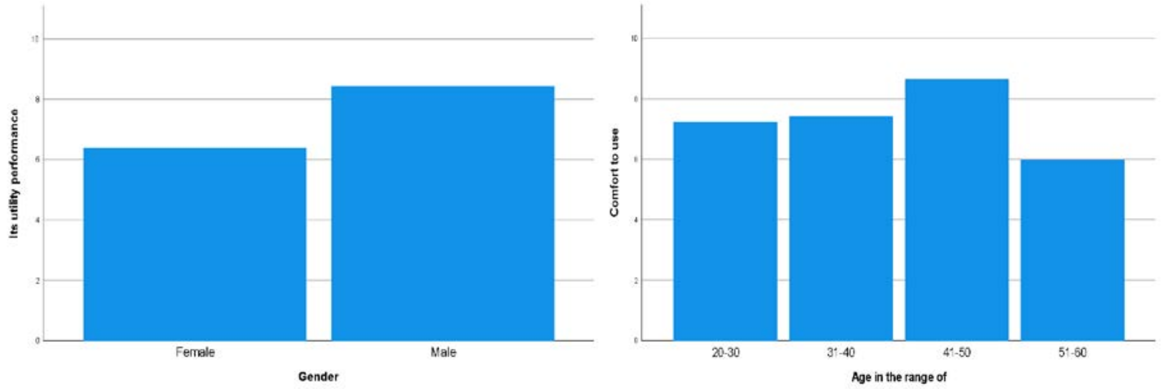

Fig 4: Results summary for comfort to use by gender and age groups, Ganapuram Venu (2022)

Figure 4 shows that the comfort to use is voted by more male than females and the highest rating is given by the age group of 41-50 years. This also shows that the maximum comfort is felt by the middle aged male than female. With the above results, it can be summarised that the respondents irrespective of the usage responded for the awareness and need of such devices.

Conclusion

This section summarises and concludes the findings from the questionnaire and opinions of the respondents.

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.a,b	Decision
1	The distribution of Its utility performance is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.025	Reject the null hypothesis.
2	The distribution of Comfort to use is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.104	Retain the null hypothesis.
3	The distribution of Does it need improvements is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.416	Retain the null hypothesis.
4	The distribution of Your prediction about its future requirement to the society is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.393	Retain the null hypothesis.
5	The distribution of Is it worth buying is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.475	Retain the null hypothesis.
6	The distribution of How much reachable to the needy is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.665	Retain the null hypothesis.
7	The distribution of How much profit making technology, is it is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.548	Retain the null hypothesis.
8	The distribution of Does it need awareness to publicise is the same across categories of Age in the range of.	Independent-Samples Kruskal-Wallis Test	.504	Retain the null hypothesis.

Table 3: Hypotheses test summary, Ganapuram Venu (2022)

From table 3,it is evident that the significant value for the factor 'distribution of its utility performance across age categories is the same' is lesser than the acceptance value; 0.05.hence the hypothesis can be rejected, that means the opinion of the respondents across the age groups is not the same. However, for the other factors as mentioned in table 3, the significant value is higher than the acceptance value, hence they are 'failed to reject'. With the above study it is to infer that the critical technologies developed during the COVID pandemic have exhibited a positive psychological impact with the socio-economic impact.

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Virtual influencer in the marketing: A systematic literature review and research agenda

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Abstract
Influencer marketing is transforming with the advent of virtual influencers, driven by technological breakthroughs and artificial intelligence. A few studies evaluating the impact of virtual influencers on consumers and social media have surfaced. Despite the growing trend of virtual influencers, the operationalization and conceptualization of these influencers still need to be better understood. A systematic literature review (SLR) on a virtual influencer is offered to close this gap. Insights from 18 peer-reviewed articles and conference proceedings were gathered utilizing systematic review procedures and text analysis using three academic databases. The present study on virtual influencers was distilled into themes, emphasizing methodology and the context of preceding investigations. The article concludes by highlighting gap-specific research areas to aid a further investigation. This study provides an overview of the state of virtual influencers.

Keywords: virtual influencer, computer-generated influencer, systematic review, social media, artificial intelligence.

Introduction
New-age marketing's laser-like focus directly impacts the results of marketing campaigns (Chintalapati & Pandey, 2022). This new era represents the confluence of technologies that allow non-human beings inclusion into the formerly human-only environment (Arsenyan & Mirowska, 2021). New levels of interaction between people and virtual agents have been made possible by connectivity, mobility, and digitalization advancements. The "hyperconnectivity revolution" is aptly called by Gaines (2019). Recently, "virtual influencers"—agents enhanced with digital avatars made to resemble people—have begun to appear (Arsenyan & Mirowska, 2021). The advent of these influencers has changed what it means to be authentic, a critical quality of human social media influencers, specifically in digital advertising and marketing (Ahn et al., 2022). They are not conversational agents because a user-focused task does not drive them, and they are not digital avatars since they are not merely representations of users (Arsenyan & Mirowska, 2021). With their public identities and narratives, these virtual influencers are presented similarly to human influencers, allowing for more engagement between users and influencers in the virtual environment (Thomas & Fowler, 2021). Their background, personality, and post content are all still up in the air. Although they may be created using algorithms and machine learning, their identity and content do not include algorithms (Mrad et al., 2022). They communicate with people using both technology and human monitoring (Thomas & Fowler, 2021). Virtual influencers have a substantial social media following and are recognized as credible tastemakers in one or more niches (Sands et al.,2022). Prada recently unveiled their first virtual human model, or "muse," for their ReThink Reality campaign. The company's usual celebrity and influencer marketing strategy

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are replaced by the virtual muse, named after the fragrance, to better reach the tech-savvy generation Z (Hiort, 2021). It is not the first time Prada has used a virtual influencer to reframe reality. In 2018, Lil Miquela introduced the fashion company to virtual influencers for the first time. Since then, Prada has kept up its collaboration with Lil Miquela for their high-end marketing efforts and dressed Noonoouri, another virtual influencer, in their clothing. KFC, Puma, Amazon, Mini, Calvin Klein, Netflix, Chanel, and Samsung are just a few international brands collaborating with virtual influencers (Oliveira & Chimenti, 2021). Numerous people believe that virtual influencers represent the future of fashion, advertising, and commerce (Robinson, 2020).

There are many virtual influencers on social media sites, many of whom are becoming more lifelike, and the difference between human and virtual influencers is growing thinner. Additionally, they have gained popularity with customers, with 32% of millennials following their accounts on Twitter or Instagram, knowing that they are fake (Sands, Ferraro, et al., 2022). A virtual influencer can appeal to marketers given their cheaper cost and lesser risk of getting into trouble (Thomas & Fowler, 2021). However, these advantages could be deceiving, just like the endorsers themselves. Hype Auditor claims that for the same number of followers, virtual endorsers frequently cost more than genuine endorsers (Mrad et al., 2022; Thomas & Fowler, 2021), and there is some indication that virtual endorsers, like those controlled by Brud, engage in scandals on par with people. For example, Lil Miquela received criticism for queerbaiting after a Calvin Klein brand partnership in which she was pictured kissing American supermodel Bella Hadid (Sands, Ferraro, et al., 2022). Despite the controversy, according to reports, CGIs engage with brands three times more than real-life influencers (Mrad et al., 2022).

Since CGIs have only recently been developed and used in marketing (Miao et al., 2021; Thomas & Fowler, 2020; Mrad et al.,2022), few studies have looked at the results of using virtual influencers and their consequences. In light of this, it is imperative to expand our understanding of virtual influencers (Vrontis et al., 2021; Appel et al., 2020). The constantly growing body of research that concentrates on the phenomena of virtual influencers is not subject to any systematic evaluation or comprehensive analysis. Therefore, it needs a scholarly and strategic understanding of how marketers should make the most of this new instrument. The primary objective of the present work is to fill up these gaps as a crucial social media paradigm that will impact social media, marketing, and advertising in the future (Robinson, 2020). Our review makes several contributions to marketing theory and practice. First, we summarise the pertinent literature and map the topics that have been researched up to this point. Second, we offer the first comprehensive analysis of the prior research on the subject. This review examines existing literature and suggests future study objectives around virtual influencers.

Background

The phenomena of graphics existed way back in the early 90s, with animated characters being the forerunners (Conti et al., 2022). The use of animated images, figures, and characters in movies and video games has altered how we view our surroundings (Sookkaew & Saephoo, 2021). Given the high level of audience engagement it produces, the entertainment and advertisement industries have employed computer-generated graphics as a marketing tool since the 1940s (Conti et al., 2022). Graphic design has grown simpler in today's society by creating an ideal persona to communicate or represent the creator's vision. Some major labels, like Gucci, have had success getting buyers to dress up their virtual selves in their merchandise and post the results on social media (Miao et al., 2022). Businesses are heavily investing in avatars to better interact with and service their customers. The use of avatars is anticipated to rise by 187 percent for consumer products and 241 percent for the

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travel and hospitality sectors (Miao et al., 2022). Virtual influencers, a relatively new phenomenon, first appeared in 2016 (Conti et al., 2022) and were recognized as "influencers" because they actively participated in marketing and social media efforts. They constantly expand in the digital sphere and are similar to human influencers because they have their personalities and tales (de Brito Silva et al., 2022). Lil Miquela, arguably the most well-known virtual influencer, was made in 2016 and has a classic "Instagram appearance" (Sands, Ferraro, et al., 2022). Since then, Lil Miquela has amassed a social media following of more than 3 million; the account has collaborated with brands like Chanel, Burberry, and Fendi, and she was named with Rihanna, Donald Trump, and Kanye West as one of the time's magazine most influential people (Robinson, 2020). Her expected earnings per post (EEP) range from $6,056 to $10,093, showing her success and being well-liked (Conti et al., 2022). In one year, Rozy, another virtual influencer, obtained over 100 sponsorships and endorsements, earning close to $1 million in 2021 (Sands, Ferraro, et al., 2022). By using virtual influencers, brands can decrease the potential for human error and have more control over the actions and content of influencers (Liu & Lee, 2022). Even though the COVID-19 epidemic caused the world (and many human influencers) to stand at a standstill, several significant corporations partnered with virtual influencers. To spread the best practices against COVID-19, virtual influencer Knox Frost and the world health organization (WHO) cooperated. He posted a link to the WHO's donation page in his Instagram feed to help the COVID-19 fundraising campaign (Conti et al., 2022). Brands are increasingly working with them to market their goods and engage audiences. In recent years, brands like LVMH, Puma, Mini, KFC, Netflix, Nike, Amazon, Samsung, and the World Health Organization have collaborated with CGIs (Sands, Ferraro et al., 2022). Research on AI and machine learning also suggests that virtual influencers may have beneficial effects that can be realized. In particular, the line separating human Behavior from bot-like Behavior is blurring, making it potential for a bot to gain enormous power (Sands, Campbell, et al., 2022).

Research Methodology

Aims and design

The current study aimed to synthesize the literature on virtual or computer-generated influencers to highlight, examine, and pinpoint research gaps and future research prospects. It was done by conducting and reporting the study following the Preferred Reporting Items for Systematic Reviews (PRISMA) standard (Moher et al., 2009).

Inclusion criteria

All studies acquired had to meet several prerequisites for the systematic literature review. More specifically, the research required to meet the following requirements for inclusion: (1) published since 2016; (2) published in peer-reviewed journals and conference papers, (3) written in English; and (4) primarily focusing on virtual influencers solely.

Information search and sources strategy

The following databases: Scopus, Web of Science, and Google Scholar, were used to conduct searches for pertinent literature. These databases were selected because they offer the broadest coverage and are regularly utilized by cutting-edge systematic reviews (Vrontis et al., 2021; Chintalapati & Pandey, 2022; Szolin et al., 2022). We restricted our search to English-language, peer-reviewed journal papers and conference proceedings, excluding books, book chapters, editorials, lecture notes, and other non refereed publications to be in line with earlier comprehensive reviews in the fields of influencer marketing (Vrontis et al., 2021) and artificial intelligence (Chintalapati & Pandey, 2022). Then, we looked through the titles, author-provided keywords, and abstracts of potentially related papers because the authors' selections of words or phrases in these areas encapsulate the spirit and substance of their works. When a different keyword pertinent to the original query string was discovered, it was noted and added to the next search. This allowed us to identify several relevant keywords that were frequently used, showing a pattern. Using the Boolean OR operator, the following search terms were used to look for relevant articles on virtual influencers in various databases: "virtual influencer" OR "computer generated influencer" OR "artificial intelligence influencer" OR "AI influencer" OR "computer generated image influencer" OR "CGI influencer," a variety of virtual influencers' terminology was chosen to collect a wide breadth of relevant material.

Study selection and data collection processes

Every paper that emerged during the search was initially examined by its title and abstract. Then the complete texts of the remaining studies were carefully reviewed and vetted by the previously mentioned eligibility criteria. A flow diagram of this procedure is presented in (Fig. 1). This details the total number of articles submitted at each stage and the elimination causes.

Results

Academic literature

After using the search terms to scope the academic literature, we ran a query using a combination of these keywords in the fields related to "title," "abstract," and "keywords." In 2016, Lil Miquela, the first virtual influencer, made her Instagram debut. Therefore, the documents published since 2016 have been reviewed only until September 30, 2022. Firstly, the keywords "virtual influencer," "computer-generated influencer," and ``` `` artificial intelligent influencer" were searched in Scopus, web of science, and google scholar databases. All papers having the keywords mentioned above in the "article title," "abstract," and "keywords" were taken into consideration. In the first phase, there were 371 hits in Google Scholar, 26 in Scopus, and nine on the Web of Science. Initial hits from all three databases came to a total of 405 hits. Once we excluded non-academic peer-reviewed articles (136), papers not written in English (103), dissertations (65), and articles published before 2016 (26), potentially 76 relevant articles were left. We manually read the titles and abstracts of all articles identified through this process and removed duplicate articles (31), leaving us with 45 journal articles and conference proceedings. We conducted the full-text screening for the remaining articles because the relevance and eligibility were not evident in the title or abstract. After this screening process, 28 studies were disqualified as they did not satisfy the inclusion mentioned above requirements. These exclusions included I) not being deemed relevant to virtual influencers (e.g., the effect of incorrect social information on collective wisdom in human groups, an emerging theory of avatar marketing): (n = 25); (ii) conference lecture notes (n = 2); (iii) newsletter (n=1). Applying this criterion excluded studies that did not exclusively focus on the virtual influencer. For example, although the study of (Miao et al., 2022) investigated the use of avatars in contemporary marketing tactics and their efficiency in reaching performance targets (such as purchase likelihood); examining the study more closely reveals that this study examined all types of avatars (e.g., Simple avatars, 3D-looking avatars that are only surface-level, intelligent but unrealistic avatars, and digital humans as avatars). In another study by Jayles et al. (2020), which explores incorrect virtual communication impact on collective wisdom in human groups, the article studies virtual communication, not an influencer, and Similar phrases that do not specifically mention virtual influences were eliminated from the study's final selection.

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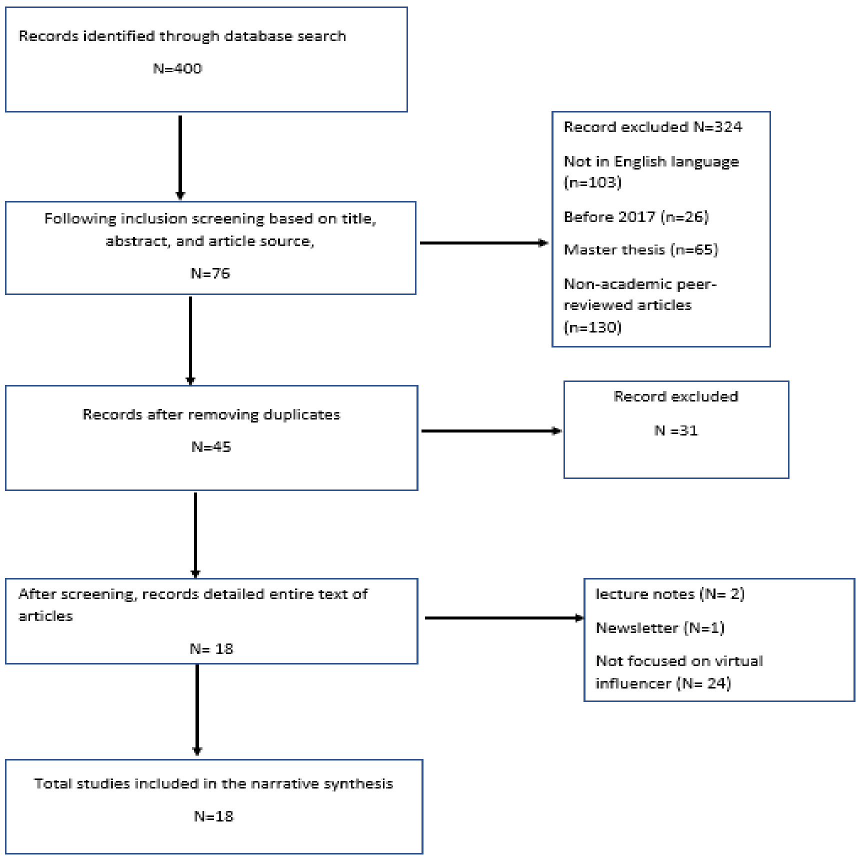

Fig. 1 PRISMA Flow Diagram

Following the aim of this review, the paper is to explore the studies on virtual influencers only. After that, we looked through the references of the articles we had already chosen to find any new manuscripts that the search engines might have overlooked (Rana & Paul, 2017). This additional stage resulted in one more research. A total of 18 studies were reviewed in this article, summarising the general characteristics and findings in Table 1.

Table 1. Main characteristics of reviewed studies (N=18)

Study	Research aim	Method	Findings
Arsenyan & Mirowska (2021)	To study how much virtual influencer behavior in human networks resembles that of humans; and how people react when human and virtual influencer interactions are made public.	Content analysis	The animated virtual influencer (AVI) earned the most comments, but humanized virtual influencer (HVI) received longer comments, more likes, and video views. Although receiving more engagement, human-like virtual influencers get fewer favorable responses demonstrating the uncanny valley.

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Park et al. (2021)	To analyze how the quantity and types of social actors in Instagram's content affect users' reactions.	Sentiment analysis through LIWC (linguistic inquiry and word count)	The results show that users speak more positively and anxiously in content that includes both real and virtual influencers than in content that solely has virtual influencers.
Thomas &Fowler (2020)	To determine if an AI influencer's wrongdoing affects consumers' attitudes and intentions to buy from the sponsored brand. And how a brand could successfully distance itself from an offense committed by a virtual influencer.	Quantitative, between subjects' experimental.	Customers are less likely to view a celebrity endorser's conduct as interchangeable than they are to see a transgression by an artificial intelligence (AI) influencer. When a human endorser takes the role of an AI influencer who has committed an offense, the impact on brand reputation is lessened.
Mrad et al. (2022)	To investigate the essential elements that make up a virtual influencer identity and analyze the link that develops between a virtual influencer and its digital setting.	Qualitative, semi-structured interview.	Virtual influencer authenticity and dependability increase with anthropomorphism
Block & Lovegrove (2021)	To study whether and how influencer marketing and public relations strategies are being hampered by computer-generated imagery (CGI) characters.	Mixed method: digital ethnography, textual and sentiment analysis.	Miquela's dissonant, uncanny human/non-human ethos fascinates and draws her supporters.
Sookkaew & Saephoo (2021)	To research the factors that influenced the acceptance and appeal of the technology trend and the popularity of virtual influencers.	Content analysis.	Physical and medical limits, the workplace, travel and time, customization to fit the material, and getting over legal restrictions were all factors identified as the success of virtual influencers.
Moustakas et al (2020)	To investigate the benefits and drawbacks of utilizing fictional characters in marketing.	Qualitative, semi-structured interviews with experts.	Challenges include a lack of authenticity, a significant financial commitment, and a potential risk to brand recognition. Storytelling and attributing human traits are success factors.
Oliveira & Chimenti,	To analyze the impact of non-human influences on	Mixed methods:	The study identified five categories—

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(2021)	marketing communication.	systematic literature review, netnography, and interviews with experts.	anthropomorphism, attractiveness, authenticity, scalability, and controllability—that can help managers make decisions about virtual influencers.
Miyake (2022)	To research semiotic immaterialism, theoretically develop the virtual influencer, and analyze how Japanese virtuality is portrayed to readers in popular western media literature.	Textual analysis	Imma demonstrates how the immateriality of Japanese race and gender is materialized through the digital and self-orientalist commodification of Japanese virtuality.
Stein et al. (2022)	To investigate how online audiences interact with and relate to these artificial digital creations and to compare viewers' parasocial interactions with real or virtual influencers.	Quantitative	The result indicated that if participants also identify the persona with a lower mental human-likeness similarity to themselves benefit is diminished. A considerable direct effect means stronger PSIs with the virtual influencer.
Sands et al. (2022)	In this article, the artificial intelligence (AI)-generated social media influencers are compared to conventional (human) influencers to analyze how consumers react to each.	Quantitative experimental	According to the study, consumers are equally willing to follow human or artificial intelligence influencers. AI influencers are more likely to elicit word-of-mouth intentions.
Liu & lee (2022)	This study explored the degree to which consumers blamed virtual influencers for endorsement failure and success and the human manipulations behind the scenes. It also examined how these attributions varied from human influencer situations.	A quantitative experimental study.	Virtual influencers were held less accountable than human influencers for an endorsement failure brought on by an influencer. Companies and supported brands of virtual influencers, however, were given a lot more responsibility than their human counterparts.
Conti et al. (2022)	To analyze the threats and opportunities starting from their evolution.	Social media analysis	The company might benefit from additional flexibility from virtual influencers, which would increase its exclusivity, innovation, and brand security.
Robinson (2020)	To analyze ontological and ethical issues raised by the rise of virtual	Conceptual	Miquela and other "real life" influencers are not meaningfully different.

	influencers.		
Sands et al. (2022)	To study the challenges and opportunities virtual influencers bring for organizations and managers.	Survey	Opportunities identified were: humanizing virtual customer service, leveraging native advertising, developing on-brand proprietary influencers. And challenges: the unrealistic notion of beauty, authenticity, and ethical requirements.
Ahn et al. (2022)	To investigate how consumers' perceptions of virtual influencers' sponsored posts through social presence and perceived attractiveness as mediators are influenced by their perceived anthropomorphism.	Quantitative	The apparent anthropomorphism of the CGI influencer effectively increases her social presence, which raises perceptions of her physical and interpersonal appeal.
Choudhry et al, (2022)	To study the reasons why individuals interact with these digital beings.	Qualitative, interview	Virtual influencers (VIs) have a distinctive blend of visual appeal, charisma, and imaginative storytelling. Consumers show trust in fields such as technology, music, games, and art, and followers are hesitant to give virtual influencers in general credit for reliability.
De Brito Silva et al., (2022)	To examine the advantages, risks, and workings of avatar-based influencer marketing.	Exploratory and case study.	Categorize influencers into two topologies: a) Incarnate avatars b) Influential avatars

Identification studies

These 18 research studies covered various virtual influencer-related topics. An Excel spreadsheet was used to record information about the articles, while the Mendeley database was used to store the actual articles. The spreadsheet included each article's technique, theory, and primary findings in addition to the title, authors, journal, and publication date. After entering this data, we used a methodical technique to find the standard motifs that appeared throughout the sample (Braun & Clarke, 2006). After reading the articles independently, both researchers collaborated to choose the themes. To do this, the researchers examined each article's key findings and determined its central theme.

Potential and risk

A total of five studies (Sookkaew & saephoo,2022; Moustakas et al., 2021; Conti et al., 2022; Sands, Ferraro, et al.,2022; de Brito Silva et al., 2022) focused on the potential and risks regarding using these fictitious characters as a marketing tactic. The strengths of the virtual influencers highlighted in the studies were flexibility, exclusivity, and brand security; younger audiences perceive businesses that work with virtual influencers as being more tech-

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savvy and inventive than those with human influencers. Virtual influencer threats identified were unrealistic expectations, unrelatable, lack of authenticity, need for high costs, problems with the law, and risking public opinion with poor execution. Further, the study identified that the level of discomfort that virtual characters can induce increases with their lifelikeness. This suggests that Brands need to create influencers that are human-like but not too human-like that they spread doubt; having false ideas about the definition of what is considered to be culture, style, and beauty poses a threat to media and cultural development.

Followers' and expert perceptions

Two studies (Mrad et al., 2022; Choudhary et al.,2022) explored what motivates people to interact with these digital entities by interviewing the followers of virtual influencers. In addition, Baptist & Chimenti (2021) investigated how non-human influencers affect marketing communication using a systematic literature review, netnography and in-depth interviews with experts. According to the findings, what distinguishes virtual influencers from actual human influencers is a unique blend of visual allure, a sense of mystery, and innovative tale-telling. Followers appear to have a strongly anthropomorphized view of them. Findings show that a virtual influencer's authenticity and dependability increase with how human it seems when its creator is not hidden (Mard et al.,2022). The followers also promote virtual influencers' participation in non-commercial causes and campaigns. However, findings show they are hesitant to put their faith in general besides niche industries like technology, music, gaming, and the arts (Choudhry et al., 2022). The research suggests that virtual influencers' creators should be more forthright about disclosing their identities, which raises some credibility difficulties with CGIs. As a result, there would be greater confidence between the CGIs and their supporters, encouraging people to get more interested and invested in the connection. It is identified that the effect is so tremendous that impulsive purchasing tendencies should result from it (Mard et al.,2022).

Baptist & Chimenti (2021) identified five categories- attractiveness, authenticity, and controllability from the literature review and the other two categories, scalability and anthropomorphism/humanization through expert interview and netnography—that can aid management choices and future research on Virtual influencers. The results of this study indicated that it is conceivable that some industries will prioritize or have more VI representatives in the future, mainly due to the controllability, scalability, and possibility of customizing one's own VIs and environmental sustainability. This study predicts that investing in human influencers will be the fundamental level while investing in VIs will be the most advanced and prestigious level in some sectors.

Posting habit and user's reaction

Two studies focused on posting habits (Arsenyan & Mirowska, 2021b) and users' reactions to the quantity and variety of social actors on social media (Park et al., 2021). The research suggests that users may find it difficult because of the high degrees of human likeness attained by CGI technologies and their functionality, such as emotional expression; users may find it challenging to identify whether something is real. Instead of making virtual influencers as humane as possible, practitioners may keep a part of their "virtualness" intact, understanding that this goal may conflict with the boundaries of people's psychological responses to non-human entities. However, it also seems that some consumers, although aware that the influencer is only imaginary, whether created manually by humans or automatically by AI, can embrace the virtual influencer owing to its merely attractive and unique appearances and behaviors.

Marketing communication and public relation

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Block and Lovegrove (2021) explored how CGI influencers, such as Lil Miquela, are interfering with or disrupting public relations or influencer connections and practices, in addition to the techniques and tactics used by Miquela's designers to achieve their goals. A four-tiered theoretical framework made up of theories of identity influence, parasocial relations, algorithmic branding, and culture jamming that are all connected by the Freudian concept of "the uncanny" has been used in this study by examining Miquela's posts, news media coverage, and followers' comments from her first appearance with a focus on the years 2018 to 2020. The research indicated that Miquel deliberately employs "honest fakery," and she is open and explicit about her computer-generated identity and life in her profile and posts, which may be taken as authentic, particularly in today's digital world where "the distinction between truth and falsehood has become irrelevant." They further argue that Miquela's dissonant, uncanny human/non-human ethos fascinates and draws her supporters, especially given that a sizable portion of the most popular comments explicitly mentions Miquela's computer identity while expressing adoration and respect. Thus, this study focuses on how anthropomorphism positively influences consumer evaluation.

Culture and ethical issues

The following study by Robinson (2020) explored the ontological argument that there is no appreciable difference between Miquela and other "real life" influences. This leads to a discussion regarding ethical concerns such as moral responsibility, motivation, and transparency. The results indicated that the ontological claim that Miquela and other "real life" influencers are not meaningfully different from one another. Both have distinct values and views portrayed in personalities that gradually change over time while holding onto their core elements. This study suggests that the virtual influencer might appear undesirable, but it is nothing different from what's real-life' influencers do. This goes in line with the results Block and Lovegrove (2021) found, which highlighted that the distinction between truth and falsehood has become irrelevant in the digital world. In addition, the concerns revolve around the accountability and morality of virtual influencers; as human influencers are accountable for the information in their posts, it is less obvious how virtual influencers may be held responsible in the same manner.

The subsequent study conducted by Miyake (2022) critically examined Japanese race and gender in the context of virtuality, (im)materiality, and digital consumption. The study uses textual analysis of Imma's Instagram posts, captions, and popular western publications about Imma. The results of this study demonstrated that Imma, as a virtual influencer, depicts how the Japanese race and gender are materialized and made real by monetizing Japanese virtuality in the digital and self-Orientalist spheres. This study focuses on the ideological components of media texts offered for consumption. In contrast, Miyake (2022) did not consider audience reception-related concerns (such as consumer trends, focus groups, and interviews).

Virtual influencer endorsement

Two studies incorporating experimental design were regarding virtual influencer endorsement failure (Thomas et al.,2021; Liu & Lee,2022). The result shows that whether an endorser is a celebrity or an artificial intelligence influencer, their transgressions negatively impact the brand, lowering perceptions toward it and purchase intent (Thomas et al.,2020). Furthermore, in the event of an endorsement success, human influencers were given more credit than virtual influencers (Liu & Lee, 2022). The result indicated that, for both endorsement triumphs and failures, consumers far more blamed virtual influencers than brands when the endorsement resulted from influencers. When an AI influencer violates the law, replacing them with a celebrity endorser results in more favorable brand opinions and increased buy intentions (Thomas et al.,2021).

Parasocial relation

The following study incorporating experimental design (Stein et al., 2022) investigates parasocial responses toward a human and a highly comparable virtual influencer, specifically in the setting of video streaming. Online users interact with and relate to these synthetic digital works. The study explores potential mediating factors for viewers' parasocial reactions, such as perceived resemblance and imaginary identification, as well as various assessments of the relevant online celebrity's human likeness. Even though the assigned influencer type significantly impacted viewers' judgments of human visual similarity, the study did not link such assessments to parasocial relation intensity. This suggests that, in terms of our operationalization of human likeness, participants' perceptions of the represented online celebrities may have been significantly more influenced by the conceptual dimension than by the visual sub-scale.

Effectiveness and social presence

The following study (Sands, Campbell, et al., 2022) investigates consumer responses to AI influencers. Compares the effectiveness of human and AI influencers' effects on social psychological distance and the subsequent impact on essential outcome variables, intention to follow, source trust, and word-of-mouth (WOM). Mediated moderation models the role of the consumer's need for uniqueness as well as social distance. The following article (Ahn et al., 2022) examines the literature on interactive advertising using the computer as a social actor (CASA) framework. It also emphasizes the value of social presence in enhancing consumer response to CGI influencers' brand endorsements. This study suggests that rather than the influencer's physical attractiveness, relatability and likability, predominantly projected through posts, are essential to increase endorsement effectiveness. The study suggests that advertisers should pay close attention to if and how CGI influencers exhibit social presence and enhance social appeal in their posts when choosing influencers and developing endorsement messages (Ahn et al.,2022).

Future research agenda

According to keyword analysis, product categories and industries like fashion, tourism, lifestyle, luxury, toys, gaming, and health influencers would benefit tremendously from collaborating with virtual influencers. We urge additional investigation of virtual influencers from an industry-specific angle. As an extension, it would be interesting to investigate the various product categories and sectors to look for differences in product types, thereby reflecting the efficiency of whether animated or humanized virtual influencers are more influential. The importance of such research to marketing professionals is substantial. Given that vast brands like Gucci, Versace, Chanel, and Burberry are frequently promoted by virtual influencers, any distinctions between well-known and lesser-known brands may provide insightful information and light on the effectiveness of virtual influencer marketing.

To explain the effectiveness of marketing strategies, research on social media influencers (Vrontis et al., 2021), human-chatbot interaction (Rapp et al., 2021), avatar marketing (Miao et al., 2022), and human-robot interaction (Edwards et al., 2019) have strongly depended on concepts and ideas that are prevalent in literature on advertising, marketing, and endorsement. Source credibility, persuasive knowledge model, social identity theory, two-step flow communication, social exchange theory, theory of reasoned action, and computer as social actor theory. These theories can also be used to examine virtual influencers' customer responses and effectiveness. Furthermore, more interdisciplinary collaboration between ideas and concepts from various fields, such as psychology, the social sciences, artificial

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intelligence, and information management from the perspective of communication technology, may result in a new understanding of how virtual influencers affect consumers and how businesses can use them. Future research should hone theoretical tools, add new techniques, and merge knowledge bases. It may also offer new, more dynamic frameworks appropriate for the social media environment, adding more generalization.

Regarding methodology, the review also highlights the need for more research that only uses quantitative methods, which could help get deep insights into the novel topic. There is a further need to ascertain if the origins and effects of social media influencers apply to both human and virtual influences and to study the differences if they do not (Vrontis et al., 2021). Thus, we encourage the future researcher to examine dimensions of human influencers such as homophily, parasocial interaction, endorser product-brand fit, source credibility dimensions, attitude towards the endorser, anthropomorphism, influencer agency, and consumer behavioral outcomes such as purchase intention, source trust, intention to follow, word-of-mouth intention, brand loyalty, brand equity. Future research may focus on this. Significant mediators such as social presence, parasocial interaction, brand uniqueness, brand attitude, consumer readiness, follower's attachment towards the influencer, engagement, and ad recognition would be worth investigating whether the mediators proposed can be applied to the virtual influencer as the majority of the suggested mediators and moderators have been demonstrated to be crucial in explaining differential effects in other contexts that are similar to this one including advertising, social media influencer (Vrontis et al., 2021), avatar marketing (de Brito Silva et al., 2022) and human-robot interaction(Edwards et al., 2019). More investigation is required to ascertain which particular features of a virtual influencer's anthropomorphic look have the most significant impacts on consumer's behavioral expectations, what form of realism components make for the most entertaining virtual influencers, or when a virtual influencer without an anthropomorphic appearance (like a noonoo uri, bee influencer, for example), would outperform an anthropomorphism influencer. Pay close attention to the ethical concerns and disclosure implications involving virtual influencers is essential. The rise of virtual influencers is considered to be damaging trust and collaboration, undermining the credibility of platforms and maybe producing less morally good outcomes (Robinson, 2020). Finding human-controlled virtual influencers' moral and legal obligations is challenging, and this will be even more difficult for AI-driven virtual influencers (Conti et al., 2022). How virtual influencer marketing affects customers should be studied further. Furthermore, there are concerns like complementarity and the eventual extinction of humans in favor of non-human species (Kadekova & Holienčinová, 2018). Instead of imposing the technology in situations where it is unnecessary, the secret to using virtual reality is to identify an issue that must be fixed (Moustakas et al., 2020). The importance of unethical or needless use of this technology can be studied from various angles, from marketing to public policies.

Discussions and implications

The current study is the first step toward a thorough literature review on the newly emerging topic of virtual influencers, helping to improve strategic research communication among the various communities, both in the academic community and across the industry. The review highlights the characteristics of virtual influencers conducted in the past five years. Most research on virtual influencers is highly recent. This demonstrates the growth of virtual influencers in recent years and indicates the academic community's rising interest in virtual communication.

Theoretical implication

The study has significant significance for researchers despite its limitations. To our knowledge, this study is the first to thoroughly analyze and assess the body of existing literature on virtual influencers. In particular, this study organizes the numerous sub-areas discovered within this research stream, maps out the existing research from a multidisciplinary viewpoint, and provides unique and broad insights, enabling a more complete and thorough understanding of the topic. This review synthesizes and expands many future theories related to the efficiency of virtual influencer marketing by integrating the scattered literature into a comprehensive and multidimensional framework utilizing a stringent scientific review methodology. This review shows that the field of virtual influencer research is developing quickly. Our review significantly contributes to the literature because it offers a solid data platform for future studies on virtual influencers. The review highlights various research gaps that provide potential directions for a prospective study.

Practical implications

This work offers various practical consequences in addition to its theoretical ones. We lay the groundwork for marketers to comprehend virtual influencers in social media settings by summarising the present corpus of study. Among distinct influencer categories, it is crucial to pick the best influencer to attract a particular target audience. The results highlight that whenever an influencer strategy is used, it is critical to choose the right influencer who would be most successful in attracting a particular target audience. For instance, if a brand wants to capitalize on word-of-mouth marketing, it should select a virtual influencer to serve as its brand ambassador. This could be especially useful for efforts to spread WOM. The results highlight that WOM for virtual influencers can be higher, which supports the choice to work with them (Sands, Campbell, et al., 2022). In addition, CGIs can eventually be seen as legitimate influencers (Mrad et al.,2022) or considered experts in one or several niches (Thomas & Flower, 2021) and can provide greater flexibility and longevity (Conti et al., 2022). However, more than expertise, flexibility, and longevity is needed to obtain the desired outcomes. Unlike the marketing initiatives where traditional celebrities are highlighted to showcase the brand, successful campaigns require influencers who demonstrate credibility, social presence, brand safety, and authenticity. Studies have shown that CGIs can eventually be seen as reliable and credible influencers (Mrad et al., 2022). In addition, participants believed they could perceive the virtual influencer's emotions and personality as a significant source of engagement, enhancing her likeability and even physical appeal (Ahn et al., 2022). In particular, when selecting influencers and creating endorsement messages, advertisers should pay special attention to if and how CGI influencers exhibit social presence and boost social attractiveness in their posts (Ahn et al.,2022).

Furthermore, research has shown that brands suffer when an endorser violates the law, irrespective of the kind of endorser used. Therefore, being a celebrity does not give you an edge in this situation (Thomas & flower, 2021). As an alternative, virtual influencers can provide an easy way to "switch off" influencer marketing without worrying about the welfare of the person hiding behind the profile.

Additionally, even while social media has helped to minimize the fact that previous types of advertising are no longer viable in the present market, influencer postings that were formerly known for their glitz and cheer are now less acceptable (Vrontis et al., 2021). Nevertheless, a virtual influencer's "genuine" fakeness might let them upload material that diverts consumers' attention (Arsenyan & Mirowska, 2021). However, it's essential to balance giving users an experience that mirrors what human agents give when integrating virtual agents into human networks. Industries should assess the realism of virtual influencer appearances because a high degree of human likeness may push the envelope of people's

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psychological reactions to non-human creatures. While some users know that the influencer is imaginary, some can embrace the virtual influencer due to their stunning and distinctive looks and behaviors. Accordingly, brands must strike a delicate balance between creating human-like influencers but not so human-like that they cause uncertainty.

The results highlight how crucial it is for those who create virtual influencers to explicitly state who they are, as not doing so might make CGIs appear less credible since there would be more trust between virtual influencers and followers. As a result, individuals would be more motivated to become invested in the relationship. The analysis has revealed that virtual influencers offer the same positive marketing benefits as celebrity endorsers (Thomas & Flower, 2020). There is even some indication that virtual influencers may provide more control and financial savings. Therefore, a virtual influencer for brands might be a good substitute. Virtual influencers can offer dependable, individualized service and support in establishing client relationships.

Furthermore, consumers lost faith in SMIs as a marketing technique due to the overabundance of advertising and the rise of influencers who frequently recommend goods and services in exchange for payment (Djafarova & Trofimenko, 2019). However, being a fictitious character, virtual influencers will make it easier for consumers to perceive influencers' posts as advertisements. Customers may value this openness because they don't like feeling deceived. Virtual influencer posts can lessen the detrimental effects on message attitude and source credibility. For one, they could continue producing regular content since they are not affected by the stress, loneliness, or sadness brought on by uncertainty.

Moreover, marketing practitioners should partner with different virtual influencers that have a good fit. Deploying a virtual influencer will be effective for brands that are creating goods, services, or experiences for customers who are trying to stand out. For instance, companies developing interests in hipsters or other distinctive subcultures that want to stand out may profit from virtual influencer involvement (Sands, Campbell, et al., 2022).

Limitations

The research has some drawbacks, starting with the possibility that the number of studies could have been constrained by the search terms employed in this paper. Although several phrases for virtual influences were included, specific research that would have been pertinent can be left out. Second, the eligibility criteria used in this review study to discern relevant and unrelated studies may have limited the research in these reviews. This research carefully evaluated studies that had a virtual influencer focus. As a result, a significant number of research that looked into avatar marketing, the metaverse, and human influencers were left out. This ensured that only studies directly related to the virtual influencers were included. Still, excluded studies might have given a chance to infer some knowledge about this developing topic, even if it was implicit or assumed rather than explicitly relevant. The current review excluded "grey literature" such as non-English, unpublished Ph.D. theses, book chapters, conference lecture notes, and publications published in non-peer-reviewed channels. It also concentrated only on peer-reviewed journal articles and conference proceedings. Due to this, the publication bias may have grown, and the research on this subject may have been underrepresented. Finding other acceptable synonyms for virtual influences, the future study may locate more relevant studies. Furthermore, as previously mentioned, the current review only looked at studies presented at conferences and published in peer-reviewed publications. Looking at relevant publications from a broader range of sources, such as unpublished Ph.D. theses, book chapters, master's theses, and papers published in non-peer-reviewed channels, may be helpful for future research. When using this "grey literature," however, caution should be exercised utilizing this research because the caliber of these publications cannot be easily guaranteed as that of those published in peer-reviewed journals.

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Revisiting Career Aspirations of Post Pandemic Millennials and their Employee Experience: A Study to Explore their Retention Strategies

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Introduction

Today's business environment is unique in its own way because it is having different generations working together for common commercial goals. Mapping diversified needs of different generations at the workplace is thus posing a new challenge for business owners and human resource managers. Each generation has different expectations, perspective and work attitude and career aspirations. In management literature people born in the same chronological, social and historical time frame are collectively called a generation. In a latest study (Bhagyashree barhat e, 2021), researchers identified five generations of employees. Silent Generation (born between 1925 and 1945), Baby Boomers (born between 1946 and 1964), Generation X (born between 1965 and 1980), Generation Y or Millennials (born between 1985 and 1997) and Generation Z or Post Millennials (born between 1997 and 2012). Post Millennials are the ones who joined the workforce around 2017-2018.

The focus of the present study is on Generation Y, more popularly known as Millennials. These are the most demanding workforce in the current job market. Research on them is imperative as they are forming an important part of the workforce with large numbers. Millennials are optimistic, well educated, talented, collaborative, influential, open minded and achievement oriented (raines, 2022). They are operating at the workplace with higher expectations than any other generation. They've grown up with smartphones, are close to state of the art digital technology and their social connectivity is extremely vulnerable to their employers. Their career aspirations, work attitude and technological orientation are affecting the culture of the 21st century workplace.

Pandemic and Millennials: Introducing Pan Millennials

In addition to dealing with different generations simultaneously, the outbreak of the pandemic across the globe has made a transformational shift in work culture in almost all business sectors (Seetharaman, 2022). This has been observed that the global crisis has not only left many organizations struggling for survival, but also forced them to adopt new strategies. New organizational dynamics like- shifting towards hybrid work model, driving people transformation, identifying and working with new patterns are desirable in the current ecosystem.

Millennials have been the spectators of social and economic changes during pandemic that force them to make shifts from traditional ways of working to contemporary working. Several researchers argue that careers of Millennials are showing increasing evidence of new career patterns with hybrid work culture (Demel, 2022) (deBenedette, 2021).

This situation is one of its kinds and observes an interesting cusp. The cusp here refers to an overlap of the two major events together i.e. Millennials and Pandemic happening as overlap

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or happening together. This interesting cusp (can be called as Pan Millennials Cusp) has attracted scholar's attention and serves as an inspiration to develop an insight into this dimension through this study. Therefore, in this paper an attempt is made to investigate the career aspirations of the Millennials in wake of post pandemic work culture. Researchers would like to refer to them as Pan Millennials in future sections of this paper.

Literature Review

Generational studies in management literature highlight the fact that the Generation X with substantial work experience used to look for employment possibilities that aligned with their professional goal. (Afsha Dokadia, 2017)) Argue that Generation X employees were drawn to positions that offered them opportunity to advance and a work-life balance rather than ones with higher economic benefits only. There are a few studies that focus on career aspirations of Millennials. Though marginally discussed in literature, it is observed that Millennials pose a challenge to be managed as human resource, due to high self-esteem and aspiration. They show a frequent "job hop" behavior, therefore it is imperative to engage them constructively (Afsha Dokadia, 2017).

Although employee retention is exhaustively covered in literature, little is known about the variables that motivate Millennials to stay at their jobs. Understanding the extrinsic and intrinsic factors that influence employee retention, particularly for Millennials, may assist managers and organizations in identifying adjustments that must be made in the near future (Rhung, 2019). Retention of Millennials is critical because Baby Boomers and Generation X are in the process of exiting the workplace. The COVID-19 pandemic has altered the course of history. Virtual reality is already more prevalent in the workplace, which may become permanent and usher in a "new normal." (Hyunsu Kim, 2021). Laskowski (2021) argues that Millennials "work to live," in contrast to their parents. Because it allows them to live prosperous lives and pursue their interests and hobbies. Although work plays a significant role in the lives of these young people. It should be mentioned that Millennials prioritize personal success, family, friends, hobbies, entertainment, pleasures, and leisure time over professional achievement in their lives. A healthy work-life balance is crucial for them.

Pandemic is not yet over. Hence, any research on post pandemic work culture needs immediate scholarly attention. However a recent study (Laskowski, 2021) throws light on the movement in human resource management towards the ailing the context of the technological, physical, and socio-psychological changes in the workplace and society brought on by the extraordinary health crisis during the pandemic. This study further elaborates a fresh viewpoint on the purpose of work, organizational leadership, contactless commerce and education, and corporate volunteerism developed during the pandemic. In light of this, business organizations around the world responded to the epidemic with exceptional agility, modifying their business models, implementing remote work arrangements, moving their operations to less afflicted locations, and redeploying furloughed workers across sectors. (Revutska, 2021)

Any study that discusses Millennials and post pandemic work culture is not so far available in Literature. Therefore the present work will make a significant contribution to literature. The major research questions addressed through the study are as following-

1. What are the career aspirations of Millennials who entered the workforce before or during the pandemic?
2. What is their general employee experience during the post pandemic situation and how it is affecting their turnover intentions?
3. Are there some strategies to retain Millennials and control their job hopping behavior?

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Design of the study

A scientific enquiry was conducted to ascertain career aspirations of Pan Millennials by following a seven step procedure. As step one, an extensive literature review was conducted to identify dimensions of career aspirations of Millennials already covered by researchers. The review helped in identifying a few variables that have been studied for Millennials in general but not have been specifically studied for Pan Millennials. These were categorized as intrinsic and extrinsic variables.

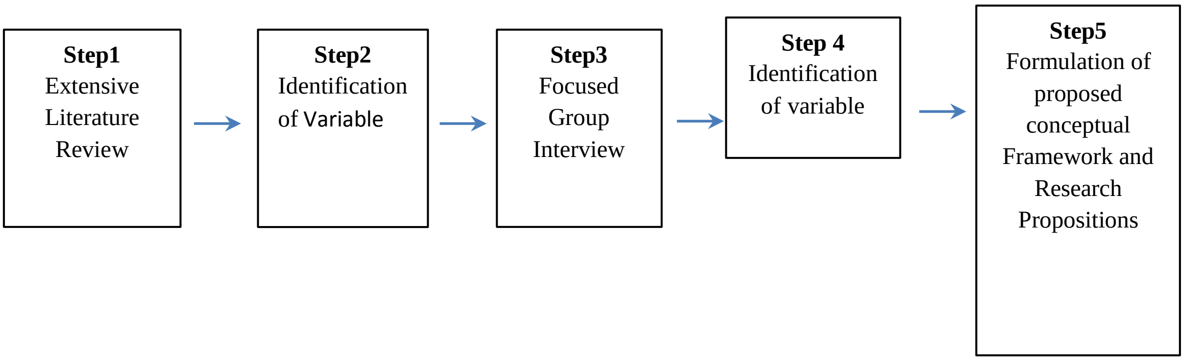

Figure 1: A Five Step Procedure of the Research

A limited but growing corpus of research has looked into work motivation of the millennial generation (Eddy S.W. Ng, 2010). Work motivation variables include both intrinsic factors (internal desires to perform a given activity) and extrinsic factors (influences that are external to the individual).In the workplace, intrinsic motivation emphasizes on benefits obtained from the work itself, as well as the need for recognition, success, and innovation. In order to motivate personnel extrinsically, external rewards like wages, money, and benefits are prioritized. Scholars have created a theory of Public Service Motivation (PSM), which postulates that millennial personnel in the public sector are more likely than those in the private sector to be driven by intrinsic reward (Ertas, 2015). Specifically, few studies have been conducted to uncover in-depth understanding of Generation Z career aspiration by categorizing them into four categories: intrinsic, extrinsic, career expectation and perceived career development. The attitude, self-perception, relationships, and motivation of generation Z may have an impact on their job aspirations. Although Generation Z values relationships at work, there is not enough scholarly inquiry. Research has not yet revealed whether they prefer to work in teams or independently. Salary was not viewed as a stabilizing influence by Generation Z. They view it as a motivational hygiene factor. The survey discovered overlaps between Generation Z and Generation X's preferences for careers (barhate, 2021). Although earlier studies offered insight on the motivational elements and job objectives of Generation Z, they were insufficient to comprehend how millennials will perform in the workplace and what are their career aspirations?

Despite the fact that literature on employee retention is extensive, little is known about the factors that influence Millennials to remain at their jobs. Managers and organizations may find it helpful to identify changes that need to be done in the near future by understanding the extrinsic and intrinsic aspects that influence employee retention, particularly for Millennials (Rhung, 2019) Following is the summary of dimension or career aspiration of millennials.

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Table 1: Literature supported Career Aspirations of millennials.

S.No	Themes	Sub themes
1.	**Intrinsic factors**	need for recognition, success, and innovation, personal commitment, interest, employment experiences, meaningful work, high quality feedback, appraisal meetings, recognition, Attitudes, relationship, self-perception motivation, environmental, familial,
2.	**Extrinsic factors**	wages, money, and benefits, Personal Experience, Compassion, personal motivation related to past experience, Work life balance through redesigned jobs, monetary and non-monetary benefits, organizational culture, work life balance, stability, Learning, Mentoring, Growth

Extrinsic Variables: Originating from outside- Pay, Bonus, Career Advancement and Promotion

Intrinsic Variables: Existing Within: Meaningful Work, Feeling of Accomplishment, Work Life Balance, Flexible Working Hours

The challenge at this stage was to identify variables which were relevant in the current post pandemic phase for Millennials. We used a focus group interview method for this. Focus group interview technique involves the use of in-depth group interviews in which participants/subjects are selected because they are purposive, although not necessarily representative, samples of a specific population, this group being “focused” on a given topic (Thomas, 1995). At this stage also, a scientific methodology was adopted to identify the participants of the focus group.

Researchers extensively used LinkedIn to search and connect with Panmillennials using adapted versions of the snowball sampling technique. It is pertinent to illustrate here the validity of using LinkedIn and adapted version of snowball sampling technique.

LinkedIn is a well-established and the most popular social networking website with more than 650 million users across approximately 200 countries worldwide (Totoro, 2017). LinkedIn is the most extensively used social platform by professionals to navigate their work life (LinkedIn 2019a). There are a few studies that underscore the use of social networking sites by professionals in pursuit of their career aspiration (Sullivan, 2021), (Leonardi, 2012), (Utz, 2016)). A recent study by (Joanna Davis, 2020) specifically highlights the benefits of using LinkedIn for career management by professionals and retrieving career benefits.

In social science research, snowball sampling is also referred to as chain-referral sampling. It is a non-probability sampling technique where existing study subjects help in recruiting the future subjects. In this research, the potential respondents of the study were identified amongst the social network of researcher’s acquaintances. Here, an adapted version of snowball sampling was used because LinkedIn was used to recruit subjects of the proposed study. Thus, in this adapted version networked relationships found on LinkedIn helped the researchers to reach out to a large number of millennials. These millennials have already entered the workforce; have witnessed pandemic and also the workplace transformation happening in the post pandemic phase. Using LinkedIn networked relationships (using adapted version of snowball sampling), 500 career profiles of Pan Millennials were downloaded. These professionals joined the workforce in the year 2018-19. To ascertain their career hopping nature, these profiles were extensively reviewed and final 264 profiles were shortlisted for further analysis. Identified 264 professionals have shown job switch even within a little span of four years (since 2018-19). Researchers believe that professionals who

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reflect such an instant/impulsive job hopping behavior have probably more vulnerable career aspirations than those with stable careers (Ivanović, 2019). Further, 264 identified professionals were contacted through LinkedIn to participate in the study. Only 13% was the conversion rate and hence, 34 finally volunteered to participate. The demographic and work profiles of 34 professionals were further analyzed in order to create meaningful clusters of the stakeholders. Their average age was 26 years. These were from IT, banking, manufacturing and service sector working at entry level management positions. It was realized that in this group, human resource professionals and academicians and researchers were missing. Human resource professionals, academicians and researchers also closely interact with millennials; hence a need was felt to include them as participants. These were separately contacted and invited to participate in the study. Thus, the final number of participants was 40. These were further divided into five intra homogenous groups with eight members in each group. In each group, professionals from different sectors, one human resource manager and at least one academician or researcher was included to maintain the intra homogeneity amongst the groups.

Virtual settings of the focused group interview exercise were designed through the platform of Zoom meetings. Researchers wanted to make sure that the groups should not influence each other. Zoom platform facilitated the scope of any such influence that could have biased the participants. The entire process was administered by authors and qualified and trained facilitators.

After the group formation and sending them invites to join Zoom meetings at different schedules. Further a de-briefing session was organized separately with each group upon their designated time schedule. The objective of the debriefing session was to make the participants familiar with the further process and this made them comfortable at the beginning. Initial queries of the participants were also handled at this stage. Most of the participants were concerned about the time to be taken for the entire exercise since most of them had time constraints. After the debriefing session the actual process of interviewing began. It was very similar to the group discussion exercise. The central theme of the exercise was to understand the career aspirations of the Pan Millennials. They were probed to provide information about their aspiration from the current and future career. The term career expectations, career motivations were interchangeably used in this process. After their comments were recorded for their general expectations from their career, these were then enquired about their current employee experience. Some questions led the discussion towards their turnover intentions. During this entire discussion, special attention was paid to assure them about the confidentiality of their information as it was sensitive and vulnerable. The entire process of probing, raising appropriate queries and management of the discussion flow was handled by qualified facilitators/moderators. The average time taken in the discussion by each group was 60-75 minutes. It is pertinent to elaborate here is that as the total number of focus groups was 5, moderators were able to see a specific pattern emerging from the first two groups and subsequent groups provided repetitive view points about career aspirations. Hence, a theoretical saturation could be seen (Casey, 1994). Finally, at the end of this stage, researchers were able to generate data based on the synergy of each group's interaction.

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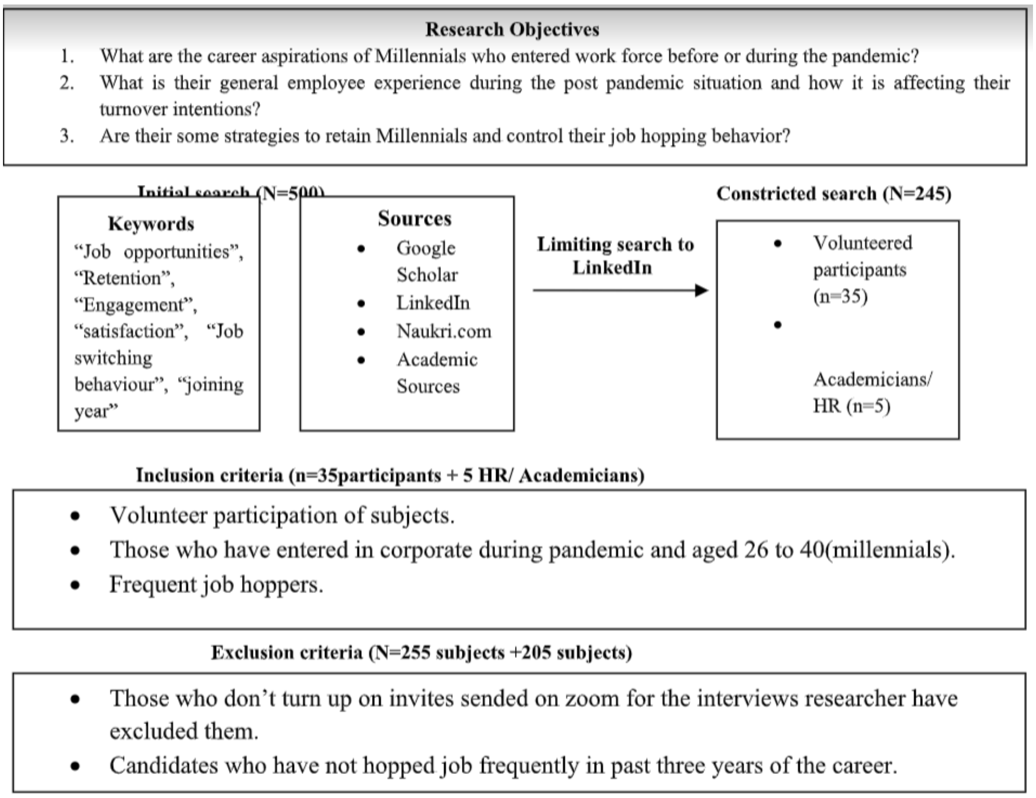

Figure 2: Self constructed by author Adapted from (Makarem, 2020)

Approach to data analysis-: Analysis of data was done using framework analysis. The uniqueness of qualitative data analysis is that it occurs concurrently with data collection. We used the following interconnected stages of data analysis as suggested by Ritchie and Spencer (1994). Figure 3 depicts the same.

Findings of the study-: We started the process of familiarization by reading the transcripts and observational notes made during the procedure after deftly facilitating the discussion and obtaining rich raw data from the interviews. Additionally, summary notes were also made right away following each interview; as a result, the processes of data collection and data processing overlapped.

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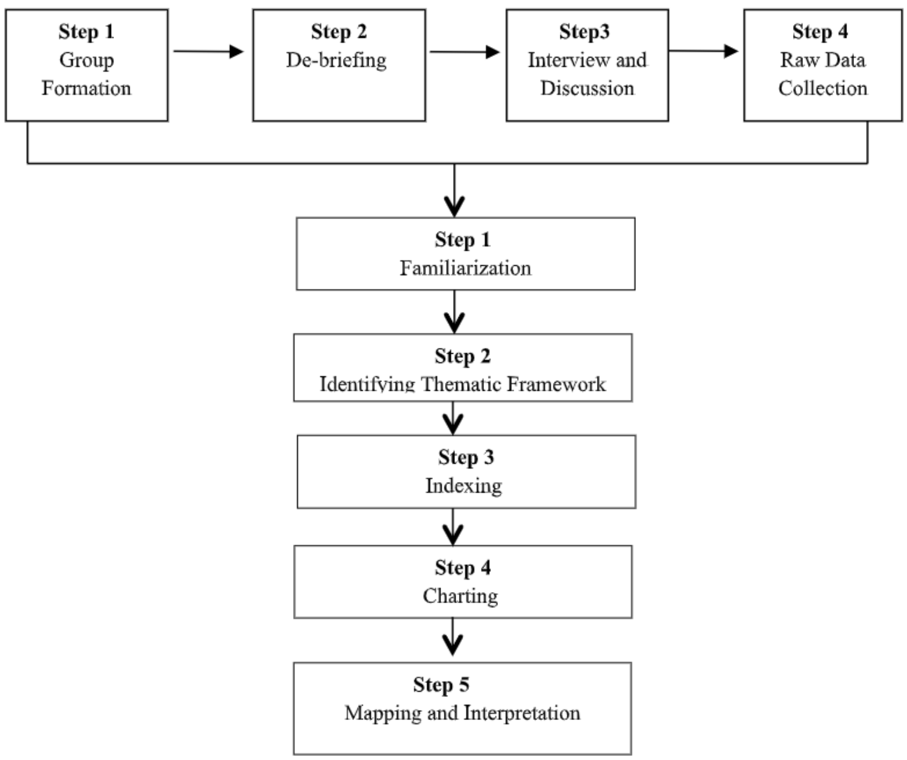

Figure 3: Steps of Group Formation and Data Collection

The first reaction that showed up can be summed up as follows: All participants agreed that they have some pre-established career goals when they join the company. If the employer does not meet their objectives, they will move on to another employer who will meet their aspirations. In addition, the majority of them stated that substantial pay is a hygiene factor for them and that they do not believe salary to be an attributing factor to stability. Respondents were asked to describe their employee experience during the interview, with interviewers providing prompts as necessary to elaborate and clarify information. The majority of respondents agreed on the fact that they are having turnover intentions due to low employee satisfaction with fulfilling their current career goals and also they claimed that a long stay in a similar organization can force them to shift towards a career plateau before reaching that stage of career. The third stage of indexing involves sorting and filtering the data. Following this, in the fourth stage (charting), the interview was recorded and transcribed within the first established thematic framework. The researcher coded the content of each respondent verified career histories to record their job trends in the three year range. Following this initial discussion, they were questioned further about the factors motivating them to stay for a longer period of time. During this process, the major themes began to emerge.

- Social cognitive is a career development paradigm that describes how individual inputs, environmental affordances, and socio cognitive variables influence the establishment of professional interests, career objectives, and behaviors.
- Personal/ Job Intrinsic They represent your goals and aspirations for your work life in the years to come.
- Contextual Factors: a wide range of variables that may have an impact on wellbeing, safety, and physical activity engagement. Personal, social, cultural, economic, and

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political influences are among them. They exist in many forms and have different effects on various population groups.

Data for stage mapping and interpreting were available. Making sense of the various viewpoints was only one of the problems at hand; another involved being creative and analytical enough to recognize the connection between the various factors and the data as a whole.

Social cognitive is a career development paradigm that describes how individual inputs, environmental affordances, and socio cognitive variables influence the establishment of professional interests, career objectives, and behaviors.

Social cognitive factors

Work life balance-: *"A pandemic has caused massive harm in both personal and professional life after it entered our world. Due to excessive working hours under the guise of working from home, we are unable to strike a balance between personal and professional life. This makes us want to look for new employment in order to achieve work-life balance".*

Peer competition-: *"I have the same role as my friends have, but they work for a different company and receive a higher salary and better working atmosphere than I do, which makes me want to change jobs".*

Present Oriented-: *"When the epidemic hit, we witnessed people who valued loyalty at work being immediately fired. We became the job-hoppers of today when loyalty suddenly stopped appearing to be rewarded as it should have been".*

Personal/ Job intrinsic factors

Meaningful and challenging work-: *"Roles are not particularly challenging, and adhering to unreviewed SOPs makes the work quite monotonous".*

Desire for Multi Skilling -: *"There are extremely few opportunities for learning in companies since tasks are repetitive; as a result, we cannot find any fresh learning to improve our skills".*

Contextual factors

Transparent communication and instant feedback-: *"High-performing workers will really look for a job elsewhere if they don't receive regular feedback or feel like they are making a difference.*

Flexible Working-*: Rigid working hours make our professional and personal life imbalance"*

Table 2: Theme Identification

No.	Theme	Subtheme
Theme 1	Social cognitive factors	**1.1** Work life balance **1.2** Peer competition **1.3** Present oriented
Theme 2	Personal/Job intrinsic factors	**2.1** Meaningful and challenging work **2.2** Desire for multi skilling
Theme 3	Contextual Factors	**3.1** Transparent communication & Instant feedback **3.2** Flexible working

The aforementioned topics have been listed in the participants' shared order of intensity. It is important to note that the interviewer provided the participants with help throughout the process by asking pertinent questions or making other interventions to identify the inhabitants. It is crucial to highlight that when writing the summary notes, we were able to identify a distinct pattern of themes that were emerging as well as a causal relationship

between the topics. Since this was only the initial group talks were recorded, and the interviewer paid close attention to the
Information that verified this causal link. All steps were made to ensure that the impartial reviewers could assess their career aspirations.

Discussion

We would like to provide the findings of the qualitative study in the form of a model based on the discussion above. The themes and casualties discovered throughout the focus group exercise are presented in this model. Although casualness was not as vivid as it may have been, it was still substantial enough. According to the focus group interview results, millennials' intentions to leave their jobs are most significantly hampered by their employee experiences. An examination of the qualitative data suggests that career aspirations have an impact on the job engagement and turnover intentions of the Pan Millennials. Employee Experience describes the extent to which a person has a favorable or unfavorable personal opinion of being an employee.
X1= Career Aspirations, X2= Employee Experience, Y1= Job Engagement Level, Y2= Turnover Intention

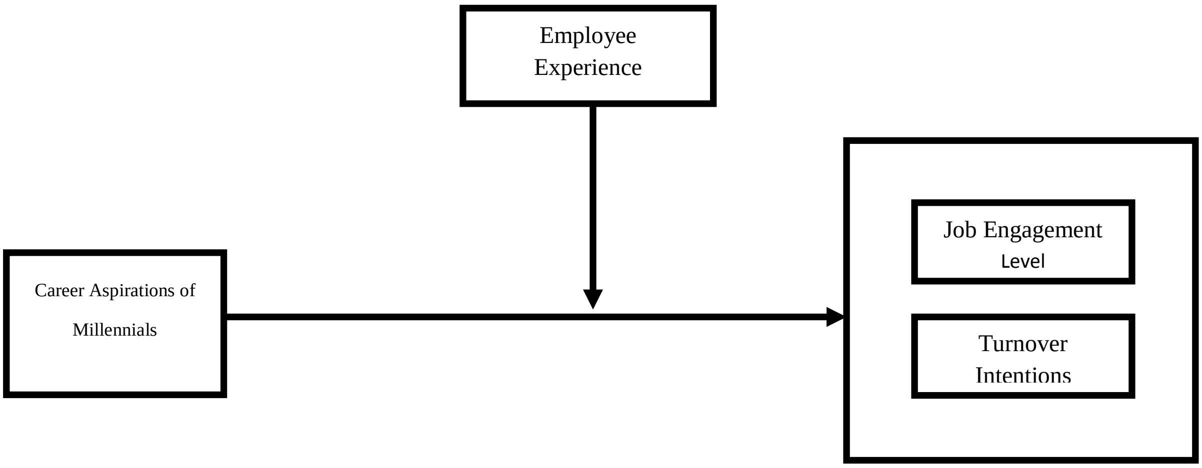

Figure 8: Conceptual Framework Emerging from Study self-constructed by authors.
The Study has already explored how factors of career aspirations affect job engagement and turnover intentions. Being a moderator variable employee experience shapes up personal attitude that directly influences Job Engagement and Turnover Intentions. Through the study it is clear that factors of career aspiration have positive relationship with the job engagement whereas it is negatively related with the Turnover intention (Higher the work life balance higher the job engagement and lower the turnover intention).It is clearly emerged from the qualitative discussion with the focus group that if organizations want to retain Pan Millennials they has to focus on the employee experience majorly. Therefore, the proposed model (Fig 4) is unique in this aspect that it identifies the role of Employee Experience on the retention of the Pan Millennials.

Implication

This research is significantly contributing to the management literature because there is no such study that investigates career aspirations of Pan Millennials. In addition to this, the present study has useful managerial implications. The findings of the study provide important insights to human resource managers in specific and functional managers in general about managing the Pan Millennials. This insight will not only help them to manage and organize their workplace in a better way but also help them to motivate and mitigate risks associated with Pan Millennials. The tool will be created by the researcher to verify the model's listed variables. The model has not yet undergone a reliability test.

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Online Education Products and Its Features for Clients: A Case Study

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Abstract
Human resources are the most important wealth that nations have and education has the main role to prepare human resources to be able to build a bright future. The main aim of the research is to explore the opinions of university students on the most important features of distance education services of the pre-university stage, in light of their recent experience of distance education during the outbreak of the COVID-19 pandemic. By using survey methods and applying descriptive statistics, the results showed that respondents do not have clear inclinations towards online education, while they considered that online education (OE) has important advantages, they did not offer a clear opinion on the flexibility of online education services. Then by applying a T-test of two independent samples, and a One-Way ANOVA test, we found that the gender of respondents, the education levels of parents, and family income, have no effects on their opinions.
Keywords: Online Education; COVID-19; Demographic Factors

1. Introduction
After the COVID-19 pandemic, many countries applied lock-down measures, to protect people's lives, where schools were closed and students at all education levels were unable to attend classes. Since then, most schools and universities have moved to online education methods to help students continue their education. This new experience of online education, especially pre-university education, was subject to many challenges such as technical awareness, and internet service availability, among others (Murphy, Ann, Derek Malenczak, and Mina Ghajar, 2019).
By reviewing the literature, we found that online education is beneficial primarily for promoting online research, and connecting practitioners to the global community, which means enhancing education equality (Pitambar Paudel 2021, Margarita Billon, Jorge Crespo, and Fernando Lera-Lopez 2021). However, there are still some challenges related to the disparity between the learning experience of the students who studied in the online mode and

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that of the on-campus students (Elizabeth Freeman others 2019). Although the flexibility and convenience of online classes make it an attractive option, students are still facing some difficulties such as internet speed in general and broadband connectivity issues in rural areas in particular, combined with technological difficulties, and online content designing, which makes it challenging for students to use online learning services. (Lama Ahmad Alsmadi and May Shikhali 2021, T.Muthuprasad, S.Aiswarya, K.S.Aditya, and Girish K.Jha 2021).

This study investigates the willingness of families to choose online education for their kids, and it tests their opinions regarding the advantages of online education and its flexibility in Bhubaneswar city in India, which were not treated in the previous studies. In addition, the study investigates the impact of demographic factors on the respondents' opinions.

In this research, we investigate the opinions regarding the application of online education and whether it is an effective teaching method for students in primary and secondary schools. We chose the university students, in the capital city of Bhubaneswar of the state of Odisha in India, as families' representatives. Because undergraduate and postgraduate students have previous experience with online education and can evaluate their families' experiences regarding online education in primary and secondary schools. This study contributes to the literature in two ways; first, it analyses the advantages or benefits, and preferences for online education during public lockdown because of the COVID-19 pandemic. Second, it focuses on online education for pre-university students (primary and secondary) in Bhubaneswar as a case study. Data were collected by conducting a survey based on a structured questionnaire which was distributed to the respondents online. Then by using SPSS, Excel software, and descriptive statistics, a T-Test for two independent samples and a one-way ANOVA test were conducted. The results showed that students, who have tried online education during the COVID-19 pandemic, were not totally satisfied with the online education services, and the study concludes that much effort should be spent to improve the quality of distance education services.

The rest of this paper is organized into four sections. Section 2 presents the related literature. Section 3 presents the data and the methodology we adopted. The results are then discussed in Section 4, and Section 5 attempts a conclusion of the study.

2. Literature Review

Generally, schools provide educational services offline. Recently many schools shifted to online education methods. Online education providers gained a lot of importance while providing educational services to students from kindergarten to the level of secondary education in a critical time when the world suffered from the outbreak of the COVID-19 epidemic leading to the imposition of public quarantine, and closing down of schools and other government institutions in many countries.

In these circumstances, online education was the best choice that could overcome these tough and unusual challenges, and it helps families to see the completion of their children's education in due time. And contributes to building a developed society. Online education has many benefits which are 1- Available in all countries 2- Saves costs and time 3- Online education systems can adapt quickly to the changes in the needs of the market and the industry (University of St. Augustine for Health Sciences, 2020). Bruce (1999) stated that learning online gives a unique opportunity to individuals who desire to study and cannot go to a residential college because of personal conditions or work-related obligations.

Online education has key parameters. The success of the online program is based on the motivational level of students, in addition to their skills in abstract thinking (Carter, 2001). Online learning is an important tool that can help teachers build up their mentoring and coaching skills and complete their goals of developing students (Chandras, DeLambo, & Eddy, 2005). Moreover, instructors need a robust technical support system and they need to

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have the training to be effective teachers online (Seaman, 2002). The learning theory should integrate into program design and implementation through curricula and training units by online education (Hergenhahn, & Olsen, 2001).

George Lambrinidis (2014) saw three e-learning tools were developed for external students to enhance their understanding of the learning materials and create a greater sense of connectedness between students, staff, and the learning materials because there are a lot of students who lack the confidence to participate and skills in an e-learning environment. Online education is beneficial primarily for promoting online research and connecting practitioners to the global community (Pitambar Paudel 2021).

There is a positive relationship between Internet use and education equality (Margarita Billon, Jorge Crespo, and Fernando Lera-Lopez, 2021). Moreover, a number of factors that decide teacher readiness to use technology are projects and workshops on technology, resources, and teachers in schools that can help others improve their preparedness to use technology. (Chantyclaire Tiba, Cape Town, 2021). On the other hand, Elizabeth Freeman and others (2019) found that the flexible learning environment has the ability to contribute to achieving equity in higher education.

T.Muthuprasad, S.Aishwarya, K.S.Aditya, and Girish K.Jha (2021) found that broadband connectivity issues in rural areas make it a challenge for students to make use of online learning initiatives. Most of the students encountered some obstacles such as internet speed, technological difficulties, and online content design. Evidence shows that students are not pleased with the distance learning experience (Lama Ahmad Alsmadi and May Shikhali, 2021).

It is evident from the literature that online education was important during covid-19 pandemic. A large number of online education tools have been developed to implement online or hybrid learning. However, there are some difficulties in imparting online education as stated by many authors. We do not find any study on the acceptance and effectiveness of online education for school going kids after the covid-19 pandemic. Therefore, we have undertaken a study of the willingness of families to choose online education for their kids and the advantages and flexibility of online education.

3. Data Collection

This study uses primary data that was collected by conducting a survey based on a structured questionnaire. We shared a structured online questionnaire with students in Bhubaneswar, India, to investigate their preference for choosing the online study method for their relatives in primary, middle, and high schools. We received 165 valid responses from the respondents. To test the effect of demographic factors, this study included some variables, such as 1- Gender. 2- Whether both or one of the parents are educated. 3- Family income. 4- Age. The pentatonic Likert scale has been used for the collection of data as mentioned in Table 1.

Table 1: Pentatonic Likert scale

Value	Attitude
1	Strongly agree
2	Agree
3	Neutral
4	Disagree
5	Strongly disagree

4. Methodology Adopted

The aim of the research is to explore the opinions of university students on the most important features of distance education services, so the descriptive research method is chosen. We used

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some statistics to show the structure of our sample, such as the mean and the interquartile range (IQR), where IQR explicates the distribution range of 50% of not outliers values. Moreover, this study tests the effect of demographic factors on students' opinions by applying a T-test for two independent samples, and a one-way ANOVA test.

Table 1 shows the option of the respondent's answers, which take values from 1 to 5. However, for the average of the sample, the number maybe would not be an integer, so we need a method to decide to which point of the Likert scale the average of the answers of the respondents belongs. The pentatonic of the Likert scale includes 4 decimal ranges between them. If we divide these 4 ranges unites to all 5 opinions then we get the average = 4/5 = 0.8, according to that each level of answer should have a length equal to 0.8, for example, the “Strongly agree” area is: from 1 to 1 + 0.79, and so on, the distance was divided as shown in the following table:

Table 2: Weighted mean

Corresponding value range	Attitude
from 1.00 to 1.79	**Strongly agree**
from 1.80 to 2.59	**Agree**
from 2.60 to 3.39	**Neutral**
from 3.40 to 4.19	**Disagree**
from 4.25 to 5.00	**Strongly disagree**

The questionnaire includes 11 questions using the pentatonic Likert scale. In Table 2, we can know which level of the pentatonic Likert scale, the average of the respondents' opinion, belongs to each of the 11 questions (Alghamdi, Hanaa Mohammed, 2020).

5. Data analysis and Results

In this section, we analyze the data collected through a questionnaire study using one-way ANOVA and T-test with SPSS software.

5.1 The sample of the study

We have used Cronbach's alpha value to measure the internal consistency of the responses.

Table 3: Cronbach's Alpha Scale

Cronbach's Alpha	Number of Items
0.79	11

Cronbach's alpha coefficient value was 0.79 for the 11 questions. This indicates that response values for each participant across a set of questions are consistent. For a better understanding of the study sample, Table 3 shows the descriptive statistics of the variables.

Table 4: Descriptive Statistics

Question	Mean	IQR	STD	Max	Min
Age	24.05	3	3.7	45	18
Gender	1.61	1	0.49	2	1
Income	2.06	2	0.99	4	1
Parents’ Edu.	2.45	1	0.86	3	1

5.2. Willingness of online education

This section illustrates the opinion of respondents regarding the willingness to use online education and the effects of demographic factors on their opinions.

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Table 5: Willingness of online education

Willingness	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard deviation	Trend
Recommend OE	16	36	48	37	28	3.15	1.22	Neutral
	9.7%	21.8 %	29.1%	22.4%	17%			
Evaluating OE Services	10	27	61	40	27	3.28	1.11	Neutral
	6%	16.4 %	37%	24.2%	16.4%			
Preferring OE	14	35	70	32	14	2.98	1.04	Neutral
	8.5%	21.2 %	42.4%	19.4%	8.5%			
Trusting OE Services	11	51	66	27	10	2.84	0.98	Neutral
	6.7%	30.9 %	40%	16.4%	6%			
Effective OE Report System	89	49	17	6	4	1.71	0.96	Strongly Agree
	53.9%	29.7 %	10.3%	3.7%	2.4%			
Total	140	198	262	142	83	2.8	0.7	Neutral
	17%	24%	31.7%	17.2%	10.1%			

The table shows that university students do not have clear inclinations toward online education, which means that there are advantages but there are also some challenges. These results could reflect the level of satisfaction with their recent experience of using online education at the university during the lockdown because of the COVID-19 pandemic. These results agree with the conclusions of some studies in terms of students' reactions toward online education during the pandemic (Abbasi, Sahar, et al, 2020).

5.3. The advantages of online education

This section illustrates the opinion of respondents regarding the advantages of online education and the effects of demographic factors on their opinions.

Table 6: The advantages of online education

Advantages	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	ST.D.	Trend
OE Fees are expensive	24	51	61	24	5	2.61	1.004	Neutral
	14.5%	30.9%	37%	14.5%	3.1%			
OE Saves time	36	74	35	16	4	2.26	0.98	Agree
	21.9%	44.8%	21.2%	9.7%	2.4%			
OE conditions are available	17	58	58	26	6	2.67	0.98	Neutral
	10.3%	35.1%	35.1%	15.8%	3.7%			
OE Availability	33	68	41	17	6	2.36	1.03	Agree
	20%	41.2%	24.8%	10.3%	3.7%			
Total	110	251	195	83	21	2.5	0.6	Agree

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	16.7%	38%	29.5%	12.6%	3.2%			

In agreement with the conclusions of Alshamrani and Mohammed (2019), this study found that online education saves time. In addition, the students feel that the platform is suitable for students and the fees are moderate, and they are not sure whether the platform is convenient for local internet service or not. In General, the students agree that online education has important advantages.

5.4. Flexibility of online education

Table 7: Flexibility of Online Education

Flexibility	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	ST. D.	Trend
Internet speed is enough for OE	15	62	67	15	6	2.6	0.9	Neutral
	9.1%	37.5%	40.6%	9.1%	3.7%			
Inclusivism of OE Disciplines	11	49	69	27	9	2.8	0.96	Neutral
	6.7%	29.7%	41.8%	16.4%	5.4%			
Total	26	111	136	42	15	2.7	0.80	Neutral
	7.9%	33.7%	41.2%	12.7%	4.5%			

These results indicate that due to different internet speeds the students did not show clear opinions on whether the applications of online education are suitable for the internet speed. Moreover, as there are different schools, with some having a few disciplines, and some having more, the students' opinions about whether the schools have all disciplines, were not clear. Along with the previous studies, in general, this study found that university students have a neutral opinion about the flexibility of online education services which means that online education services should be more flexible (Muthuprasad, Thiyaharajan, et al, 2021).

5.5. Testing the effect of gender

Table 8: Testing the effect of gender

The feature	Gender	N	Mean	T	DF	Sig (2-Tailed)
Willingness	Female	64	2.9	1.6	163	0.1
	Male	101	2.7			
The advantages of online education	Female	64	2.5	1.19	163	0.23
	Male	101	2.4			
Flexibility	Female	64	2.75	0.32	163	0.74
	Male	101	2.70			

T-test, of two independent samples, tests the average differences of answers between males and females. It showed that the average of females' evaluations of willingness to pursue online education, the advantages of online education services, and flexibility of online education, were (2.9, 2.5, 2.75) respectively which is greater than the average of male answers

(0.2, 0.1, 0.05). However, t-test values (T=1.6, 1.19, 0.23) respectively not significant (p=0.1, 0.23, 0.74) respectively at significance level 0.05, which refers there are no differences in the answers between males and females in the study sample about Willingness evaluation, the advantages of online education services, and flexibility of online education.

5.6. Testing the effect of social backgrounds

Table 9:One-way ANOVA test

Variables	Social background feature	F	Sig
Willingness	Father and Mother Education level	1.04	0.36
	Family Income	0.32	0.81
Advantages	Father and Mother Education level	1.22	0.3
	Family Income	1.05	0.37
Flexibility	Father and Mother Education level	0.1	0.89
	Family Income	0.25	0.86

ANOVA test showed that parents' education level and family income level do not affect students' opinion about their inclination to online education, the advantages of online education, and the flexibility of distance education. Fisher coefficient values were ((1.04, 0.32), (1.22, 1.05), (0.1, 0.25)) respectively that are insignificant at significance level 0.05 where P-values were ((p=0.36, 0.81), (p=0.3, 0.37), (p=0.89, 0.86)) respectively. From Table 7, In general: we conclude that students' opinions about their inclination to online education, the advantages of online education, and the flexibility of distance education, were not affected by the social backgrounds that they belong to.

5. Conclusions and policy implications

These days, education is the key to the creation of strong human resources in all countries. All academic bodies seek to improve their students' skills so as to achieve development and prosperity. In this study, we focus on online education as one of the modern education types. This study aims to explore students' willingness to learn in online education, moreover, in this research, we study schools' services flexibility. Distance education has a lot of advantages in existing crises. During the Corona crisis, for example, online education saved time, reduced distances, and cut education costs. This study surveyed 165 students' opinions in some universities in Odisha and used statistical tools such as the T-test, and one-way ANOVA to conduct the analysis. The results did not show any significant effects of the perceived advantages of online education on students' perspectives. That gives an indication that the target group has no trust in the distance education approach yet, and that is either because this way is recent or because it is ineffective in delivering information to students.

These results indicate that online education will take time to get learners' acceptance despite having so many advantages, and still has some wanting in terms of achieving the students' satisfaction. This study recommends that distance education companies consider the challenges that face students in using teaching software such as internet speed and software complexity. In addition, this study calls on scholars to conduct more in-depth research related to the performance and quality of distance education for different areas and for students at different studying levels.

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Studying Food Wastage Management Practices in Mass Food Preparation Kitchens

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Abstract

The Current linear economic model of extraction, production and consumption of resources is unsustainable. Roughly around a third of the food produced is wasted globally, representing significant wastage of resources. The fact that a substantial amount of food that is produced but not eaten or consumed has substantial negative environmental impacts. Estimates suggest 8% – 10% of global greenhouse gas emissions are associated with food that isn't consumed and wasted. Circular economic planning dictates that such wastage be ideally avoided, and failing that utilized to maximize recovery of resources. Energy conservation, utilization and maximizing efficiency are one of the most important fields of research. The aim of this project is to research and compare food wastage generation and handling by three food providers.

1. Introduction

The current linear system in the food supply chain is unable to address food security challenges of the global population leading to increased hunger and related fatalities. Food Security remains one of the leading global challenges in the twenty-first century. Traditionally for a transition into a circular economy the focus has mainly been on engineering or production processes, manufacturing or business industry. In a circular economy, unlike its linear counterpart, it doesn't depend exclusively on the extraction of natural resources but instead re-utilizes and re-integrates resources in a circular and sustainable manner. However, this transition, in addition to new technologies, innovations and infrastructure also requires further evaluation into food handling and wastage practices.

Developed sustainably, waste generated from organic matter like discarded food represents a significant potential to be recovered in the form of valuable products like animal feed, fertilizer and other secondary industrial input components. Evolving our food systems to be based on the principles of circular economy would be environmentally and economically prudent. With circular economic principles food wastage in food systems would be minimized helping redistribute resources to address food security. The 2030 agenda for sustainable development, adopted by United Nations Member states in 2015 outlined 17 sustainable development goals (SDGs) that committed to eradicating poverty and hunger in a sustainable and environmentally friendly manner.

Growing global population and the related increase in demand for food, its inefficient resource usage and distribution, high rates of food wastage and its environmental impact has made it critically important to study and identify key gaps in the food supply chain to address these concerns in the context of a circular economy. Current terminology related to food waste in terms of food surplus, waste and economic losses should be correctly clarified so that a sustainable food waste management system can be developed and implemented. Many countries have voted to make it illegal for the consumers as well as the commercial players to throw out unsold or uneaten food, requiring instead donation to charities, or animal feed. Many restaurants impose a fine as a form of deterrent on food wasted by their customers.

In the 2022 Global Hunger Index, India ranked 107th out of 121 countries. India's score of 29.1 on the hunger index represents the severity of this problem. India has a level of hunger categorized as serious on the hunger scale. Food security presents a severe challenge and necessitates research on the entire food supply chain to analyze wastages and inefficiencies. With a population of 1.3 billion there exist multiple mass food cooking stations throughout the country in commercial, private and public sectors. Restaurant kitchens, caterers, and central kitchens prepare food on a large scale and deal with food wastage in the form of organic wastage and food leftovers. The sourcing, preparation and disposal of food waste represents a significant cost incurred for wasted resources.

The Aim of this report is to explore the problem and factors influencing food waste in mass food preparation kitchens through a structured questionnaire submitted to a representative sample to assess daily food and energy usage, food waste generated and methodologies employed to dispose of food waste.

2. Literature Review

The following literature review describes important research results regarding food wastage in the circular economy.

- **Peter C. Slorach, Harish K. Jeswani, Rosa Cuellar-Franca, Adisa Azapagic (2019) –** Paper Titled 'Environmental and economic implications of recovering resources from food waste in a circular economy'. They researched ways to treat and recover resources from food waste through treatment methods like anaerobic digestion, in-vessel composting, incineration and landfilling.
- **Shikha Ojha, Sara Bubler, Oliver K. Schluter (2020) -** In this Insect – based bioconversions have been considered to reutilize food wastage. The paper couples the production of edible insects with valorization of food waste. The current status of insect processing and their importance in the circular economy is also discussed in detail.
- **Carlo Ingrao, Nicola Faccilongo, Leonardo Di Gioia, Antonio Messineo (2018)** - developed and researched sustainable food waste management through a set of technologies like Anaerobic digestion into high-value energy, fuel and natural nutrients.
- **Taru Lehtokunnas, Malla Mattila et al. (2020)**-Explored the transition towards a circular economy in the context of household food waste practices. It claimed that the intertwined practices, institutions and policies of the circular economy creates moral categories and responsibilities in everyday food consumption and everyday practices of food waste reduction in households.
- **Tora Holmberg, Malin Ideland et al. (2021) –** The paper unpacks the neat straightforwardness of waste management practices in a circular economy. It pays detailed attention to what is conceptualized as 'make-up' work.
- **Dominika Alexa Teigiserova, Lorie Hamelin, Marianne Thomsen (2020) –** In this paper, key gaps of food waste prevention in the context of the emerging circular economy were

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addressed. Food terminology related to food waste was reviewed and clarified to create a framework of a sustainable future waste management system.

- **R. Santagata, M. Ripa et. al. (2021) -** This paper looks into the food waste recovery pathways, their challenges and opportunities for emerging bio-based circular economy.

3. Focus of the Paper

This paper aims to study and explore food wastage generation and management practices carried out by large volume food preparation kitchens. It aims to analyze and address the following questions:

- The Nature and classification of daily waste food waste generated.
- Food waste generated during meal preparation.
- Food wastage generated due to leftover food.
- Quantification of daily food waste generation volume.
- Current food waste management practices.

4. Study methodology

A structured questionnaire was submitted to a representative sample to assess their daily food intake in terms of raw materials, their energy cost in terms of food preparation and daily food waste generated as a consequence. Two mass food preparation kitchens namely the MBA mess canteen located in K. J. Somaiya Institute of Management, Mumbai and Central cooking station of Shahji's Paratha house Pune were submitted the questionnaire to assess and analyze their daily food requirements and waste management practices. The research was carried out over an interview with the manager in charge of daily food waste disposal. The nature of the questionnaire was qualitative in nature in the form of detailed personal accounts of daily operations. The time period taken for both the representative samples was one hour. Due to the qualitative type of the questionnaire and the response data, a large pool of representative samples is desirable and further data analysis is under preview.

Representative Sample 1:

Shahji Parantha House Restaurants
City: Pune
Central Kitchen Location: Plot no 10 Ramtekdi industrial area
Operational Hours: 11 am to 11pm
Branches: 1. East street Camp
2. Laxmi Road
3. Apte Roan Deccan

Sr. No	**Questionnaire**	**Response**
1.	Monday – Friday Average footfall	200 / branch
2.	Saturday – Sunday Average footfall	300 / branch
3.	Online presence	Yes
4.	Average Bill	Rs 250
5.	Average Cost of Food ordered online	Rs 300
6.	Vegetable Purchase frequency	Daily
7.	Daily average vegetable consumption	180 kgs
8.	Daily average Raw vegetable Purchase Quantity	200 kgs
9.	Daily average Raw vegetable wastage	8 kgs

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10.	Daily average cooked food	125 Kgs / outlet
11.	Daily average cooked food wastage by customer	6.25 Kgs / outlet
12.	Daily average Leftover cooked food wastage by restaurant	5 kgs / outlet
13.	Energy Usage	200 x 20 kg Commercial gas cylinders / Month
14.	Staff dedicated to food wastage management	2
15.	Total Staff	25 / outlet
16.	Current Food waste Management Practices	• Segregation of Dry and Wet waste. • Garbage disposed and collected by the Pune Municipal Garbage collection.
17.	Waste Disposal frequency	Alternate Day Dry and Wet collection

Representative Sample 2:

Mess – K. J Somaiya Institute of Management
City: Mumbai

Sr. No	Questionnaire	Response
1.	Monday – Friday Average footfall	2500+
2.	Saturday – Sunday Average footfall	3000+

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3.	Online presence	No
4.	Average Bill	Rs 60
5.	Average Cost of Raw materials	Rs 3500000 / Month
6.	Average food preparation cost	Rs 1575000
7.	Daily average vegetable consumption	262.5 kgs
8.	Daily average Raw vegetable Purchase Quantity	350 kgs
9.	Daily average Raw vegetable wastage	14 kgs
10.	Daily average cooked food	125 Kgs
11.	Daily average cooked food wastage by customer	6.25 Kgs
12.	Daily average Leftover cooked food wastage by mess	21 kgs
13.	Total Staff	85
14.	Current Food waste Management Practices	• Segregation of Dry and Wet waste. • Garbage disposed and collected by the Pune Municipal Garbage collection.
15.	Waste Disposal frequency	Alternate Day Dry and Wet collection

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5. Limitations

- The research presented in this paper was carried out under project guidelines and for further analysis and data extrapolation would require a larger representative sample size.
- The nature of the research paper was qualitative and exploratory in nature, the research is currently in progress and comparative data would be required between similar representative samples to arrive at measured conclusions.
- Data collection methodologies at representative samples would need to be upgraded to adhere to global research paper guidelines, which may incur economic cost for the operating kitchen

6. Managerial and Policy Implication

- Outcome of the paper would lead to a detailed and accurate assessment of the food supply chain from its inception to termination.
- Food wastage analysis would be crucial to better forecast food demand cycles
- Reduced wastage of resources in terms of raw organic material, man hours, economic resources.
- Reduced Usage of overall resources utilized in the entire food supply chain.
- Environmentally sustainable Circular food supply chain.
- Reduced wastage of food.
- Increased regeneration and re-utilization of waste resources.

7. Findings

7.1 Somaiya Mess Canteen

1) Waste food is collected in a metallic container at the end of each meal, which is taken to the compost pit in the Vidya Vihar campus.
2) The manure produced from the Pit is utilized as fertilizer for the vegetation in the Vidya Vihar Campus.
3) Food wastage posters are placed all around the mess to create awareness about the consequences of food wastage.
4) Daily updated whiteboard is used to keep track of the quantity of food wasted per meal

7.2 Shahji's Parantha House

1) Challenges faced for circular economic disposal of food wastage includes lack of dedicated machinery for disposal, additional maintenance costs, training costs.
2) Low economic demand for food waste bio products, governmental slow and inaction act as hindrance for easier transition to sustainable waste management.
3) Operational inefficiencies between kitchen timings, sanitary procedures make it difficult to donate leftover food to NGOs in a safe and sanitary manner.

8. Proposed Model

- A data analytical system is required to accurately measure and track the input and output resources utilized by the kitchen in its daily operations.
- Inputs such as raw organic material, energy consumption in the form of cooking gas, Man hours required to prepare food and other ancillary costs should be standardized to be measured for each food preparation event. Measurement can be made in the form of weighing scales and a log book to maintain all the relevant data.
- Output measurement should be carried by identifying, classifying and weighing the wastage per food preparation event.
- A large representative sample would be required to be classified and categorized according to geographical profiles to help implement better logistically policy planning in the food supply chain.

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A Study on Acceptance of Collaborative Robot in Industry 5.0

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Abstract
Collaborative robots or the Cobots are designed to work together with human workers. In industry 5.0 the acceptance of collaborative robots is very important in terms of human safety, perceived benefits, perceived effort reduction, social influence, personal innovativeness, facilitating condition to use of Cobots, the organizations and it's user and the task orientation for using Cobots and technology level in the organizations. A conception model has been developed based on Unified Theory of Acceptance and Use of Technology theory along with Socio-Technical System theory and some more external variables contributing to the UTAUT model based on various literature reviews. A survey based quantitative analysis based on the structural equation model in SmartPLS 4.0 is also done using survey questionnaires and research hypotheses based on the conceptual framework and the prior research done by other researchers. Composite reliability, discriminant validity, Cronbach's α and average variance extracted (AVE=convergent validity) were considered in the analysis of measurement. Hypothesis testing and validation was also done. The study shows that performance expectancy, effort expectancy has a positive influence on the intention to use Cobots whereas facilitating conditions and social influence has no relationship with the intention of people to use Cobots. Intention to use Cobots, Actor-structure alignment, Task-structure alignment and Technology-structure alignment have constructive effect on Actual use of Cobots, but Actor-technology alignment, Actor- task alignment and Task-technology alignment has no effect on Actual use of Cobots. Actual use of Cobots does positively influence the Perceived work performance improvement.

1 Introduction

Robot originated from a Czech word 'robota' which means 'forced labour', is a specially designed machine which replaces human effort in various tasks either by manual command or some advanced programming. In 1961 'Unimate' a digitally operated and programmable robot invented by George Devol, was first used in the General Motor production line to reduce human effort and save lives[1]. During the period 1960 - 2000 was a significant time when industrial robots were deployed in various industries, especially in the automotive and manufacturing industry. In the year 2000 International Robotics Federation (IRF) estimated that around 7,42,500 numbers of industrial robots were operational[4]. In Industry 4.0 physical manufacturing, digital innovation and virtual reality are integrating together to make a smart production system. Industry 5.0 is the future production model having synergic relationships between technologies and social structure aimed to produce personalized and customized mass services and products. Collaborative robots are specially designed and equipped with sensors to work within a shared space and in close proximity with humans [3]. Collaborative robots operate in an open environment whereas industrial robots operate in closed environments. The seamless interaction ability of Cobots with humans in a sophisticated workplace is the potential advantage to expand the use of Cobots in

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manufacturing and production. But it comes with a potential issue, as Cobots work in synergy with human workers in a shared workplace, so acceptance of Cobots in the workplace is a critical factor along with safety concerns. Four levels of collaboration has been identified by The International Federation of Robotics (IFR) which are ‘Cell: The lowest level of collaboration where robots under a fenced barrier’, ‘Co-existence: Next level of collaboration where robots are not under fenced barrier but dedicated workspace is defined for human and robots’, ‘Sequential Collaboration: Human and robot the use all or partial workplace mutually but they are not allowed to work on any activity simultaneously’, ‘Co-operation: Robots and humans shares the workplace and work on same activity simultaneously’, ‘Responsive Collaboration: This is the highest collaboration where robot responds to human’s motion in real time’ [4]. Collaborative industrial robotic systems and the work environment safety requirements have been specified in the standard published in 2016 by international organization for standardization (ISO), ISO/TS 15066:2016 [5]. In the supplements published by ISO, the ISO 10218-1 [6] and ISO 10219-2 applicable to industrial robotic systems has defined the requirements and guidance to operation of industrial collaborative robots. The global Cobots market size has been estimated at USD 979.6 million in 2020. The market growth projection has been estimated from USD 1358.2 million to USD 16387.3 million in 2020 at a CAGR of 42.7% [4]. Some conceptual study has been done on the field of acceptance of Cobots in Industry 5.0 but no empirical study has been found to validate the conceptual models. This study is focused on finding a holistic view on acceptance of Cobots in Industry 5.0 based on the conceptual model and creating the measurement items for the constructs of conceptual model using the Unified Theory of Acceptance and Use of Technology (UTAUT) and Socio-Technical Systems theory (STS) and collecting data using a survey based approach, the developed conceptual model has been examined and validated in Industry 5.0 perspective.

1.1 Literature Survey

Evolution from industry 4.0 to Industry 5.0 can be termed as transition to digital society from digital manufacturing. Industry 5.0 is focussed on to achieve societal goals over the task. The core values can be stated for Industry 5.0 as creativity of human, resilience and sustainability of the process. In a study Maddikunta et al.[7] discuss about Industry 5.0 and the enabling technologies and their potential applications. Collaborative robots work together in the common workplace with humans. Zataari et al.[8] described four collaborative scenarios as Independent, Simultaneous, Sequential and Supportive collaboration.

Collaborative workspace is very important for industry to address ergonomic concerns and for productivity benefits. In a study Cherubini et al.[9] described that more than 30% of the manufacturing workers from Europe are suffering from lower back ache which can be taken care of by the use of Cobots in manufacturing assembly lines. Problem of musculoskeletal disorders(MSDs) among the workers can be addressed through collaborative robots. Collaborative robots can be well accepted in a more inclusive labour market with aging workers. Calzavara et al.[10] explained that workforce aging is the main concern for the organizations working in Economic Co-operation and Development (OECD) member countries as they have a high number of aged population and high numbers of aged workforce who are going to retire soon. Same study also discussed the management of the aging workforce through production research to support and involve the aging workforce in the manufacturing system.

Safety of humans is the major concern in human robot interaction. The International organization for standardization (ISO) has published the latest safety standard, the ISO/TS 15066:2016[5] to define the operation requirements for collaborative industrial robotic systems. Four collaborative models have been defined by the ISO which are Safety rated

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monitoring stops(SMS), Hand guiding(HG), Speed and separation monitoring(SSM) and Power and force limiting (PFL). In a study A collision avoidance strategy has been introduced by Zanchettin et al.[11] which will suggest the Cobots an alternative path to traverse optimally to avoid collision. In another study a neural network based deep learning model has been developed by Heo et al.[12] which can learn robot collision signals and can identify any future occurrence of robot collision.
Another angle of research on collaborative robots is researchers trying to simplify the programming and instruction of Cobots. Major challenges of using Cobots is fast paced dynamic workflow in instruction and programming. The major problem in Cobots programming are clumsy user interfaces and perceived environment in the same way humans perceive[13]. In the dynamic and fast changing requirement to reduce change over time and to increase efficiency, shop floor operators became responsible for necessary modification in programming[14] which offers the monetary benefits of replacing the high wage engineers with the low wage operators. Improvement of the human Robot interaction is another ongoing and challenging research area. In research Maurtau et al.[15] showed that multimodal interaction between human and collaborative robots are very important in industrial applications.
Distribution of jobs among humans and robots is another concern. In ongoing job distribution among humans and robots are based on gut feeling and knowledge acquired from experience. In a research Malik & Bilberg[16] discussed the automation potential in manual operation lines and methods of assigning the jobs between human and robots to balance the workload. Acceptance of collaborative robots is very important for successful implementation in industry. In a study Elprama et al.[17] discussed the concern of the workers about replacement of human workers by collaborative robots. The workers are concerned about synchronization and interaction with the collaborative robots rather than safety concerns. Various studies have been done on human robot co working or collaborative robot technology in context of Industry 5.0. In a study Demir et al.[18] discussed the possible issues from employees and organization standpoint related to human robot collaboration. The study also discussed other issues like legal and regulatory issues in using AI, Cobots etc. A conceptual model was developed by Prassiada et al.[19] which was based on Unified Theory of Acceptance and Use of Technology(UTAUT) and Socio-Technical Systems Theory(STS) to address acceptance of Cobots in manufacturing industry when used in Industry 5.0 era. The study listed out the critical issues that affect the behaviour and intentions and the actual usage of Cobots in the manufacturing sector. Simoes et al.[20] discussed various issues that affect the intention of managers in adopting collaborative robots in organizations related to manufacturing. In another study Lambrechts et al.[21] discussed about 66 critical incidents that influence implementation of collaborative robots in large distribution centres.

2 Methodology

Theoretical Background & Hypothesis Development

Venkatesh et al.[22] developed the Unified Theory of Acceptance and Use of Technology or UTAUT model. The model consists of four variables of intention and usages and four moderators. In UTAUT acceptance is measured in two steps namely behavioural intention and usages behaviour. To study and understand the acceptability of new technology it is necessary to understand different factors of intention and actual usages. In this research context, collaborative robots' acceptance in Industry 5.0 described through the intention to use Cobots at the time of introduction and also the continuation of actual use. Intention of using Cobots is defined as companies desire to use Cobots in operations and the actual use by the extent to which companies are interested in continuing the use of Cobots to improve efficiency. The key dimensions in the UTAUT model are Effort expectancy, Performance

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expectancy, Facilitating conditions, and Social influence. Performance expectancy is defined as perceived benefits of using Cobots in Industry 5.0. In different demography and in different technology contexts various researchers have used the performance expectancy of new technology. Performance expectancy directly affects the intention to use. In a study of internet banking adaptation Zhou et al.[24] shows that Intention to Use has been significantly impacted by performance expectancy. Effort expectancy can be described as perceived ease of work linked with use of Cobots. In a study of assistive social robots's acceptance by elderly users, Heerink et al.[23] shows that the intention to use was found to be impacted by effort expectancy. Social influence is described as the perceived importance of others' belief in using Cobots. Zhou et al.[24] shows that Intention to Use has been significantly impacted by social influence. Facilitating conditions can be described as the availability of organization and technological infrastructures to use Cobots. In a study on massive open online courses by Mendoza et al.[25] found that Intention to Use has been significantly impacted by facilitating conditions. Anxiety is described as the fear of being deprived of expected satisfaction from use of Cobots. In a study of acceptance of mobile devices and services in Finland Carlsson et al.[26] shows that anxiety influences the performance expectancy. In a study of acceptance of robotic and human cooperation Bröhl et al.[27] shows perceived ease of use is influenced by anxiety in the TAM model, which means influence on effort expectancy in the UTAUT model. Personal innovativeness is described as the intention of an individual to try out new technologies. In a study of Adaptation of wireless internet services Lu et al.[28] shows that both performance expectancy and effort expectancy is being influenced by personal innovativeness. Intention to use can be considered as usages behaviour which indicates an individual's preference to perform a specific job. Performance expectancy, effort expectancy, social influence and facilitating conditions are the influencing factors to Intention to use. Several researches have shown intention to use has influence on actual use in e-learning context [29].

UTAUT Theory cannot explain the synergy between human and Cobots collaborative work environment. The actual use of Cobots needs socio-technological analysis which can consider social subsystems and technical subsystems. In the context of socio-technical system outputs are realized when interaction happens between technical and social subsystems[30]. Social subsystem has two components, structures and actors, similarly the technical subsystem has two components, technology and task. The interrelationship can generate a total of six individual relationships i.e. actor-structure, actor-task, actor-technology, task-technology, task-structure, and technology-structure. Actor can be defined as the organization's member and the important stakeholders execute or influence the work. Structure is various systems like communication, authority, workflow etc. Task is the goals and purposes of the work and process it is done in the organization. Technology can be defined as the relevant technologies used in the organization. In the actor-structure relationship, actors are responsible for operation procedure and structure are responsible for providing support to actors in their task. In a study Lyytinen et al.[31] shows that communication systems, authority, workflow, values and norms in structures are aligned with actors to perform the task. In the actor-task relationship, actors are responsible to understand and perform the task. Through the prior knowledge or the proper job training the actor should be qualified and capable enough to perform the task. In actor-technology relationships, actors are responsible for understanding and accepting the technology and adapting the technology in the environment. In a study Venkatesh[32] shows that users accept those systems which are user friendly and useful, alongside motivation is helpful to concur the resistance of users against changes. In the task-technology relationship, appropriate technologies are chosen to support the task. Various studies have shown the co-ordination between task and technology influence not only the utilization of the resources but also the performance of the actors[33]. In the task structure

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relationship, adequate structure is defined and aligned to perform the tasks. Success of adaptation of any new technology depends on the organization's culture of knowledge sharing facility and environment. In a study Hester[34] shows that actual usage is influenced by task and structural alignment. In the technology structure relationship the structures are backed up by the technologies. In a study Strong et al.[35] shows that culture misfit of an organization can happen if used technology is against the organization's norms. The Perfume work performance improvement is constructed as the measure of work performance. In a study Yuen et al.[36] shows that usage behaviour or actual use is the influencer of perceived work performance improvement.

Based on the observations of the previous studies described above the following hypothesis can be developed:

- H1: Performance expectancy has a constructive effect on intention to use of Cobots in Industry 5.0.
- H2: Effort expectancy has a constructive effect on intention to use of Cobots in Industry 5.0.
- H3: Social influence has a constructive effect on intention to use of Cobots in Industry 5.0.
- H4: Facilitating condition has a constructive effect on intention to use of Cobots in Industry 5.0
- H5: Anxiety has a constructive effect on performance expectancy of use of Cobots in Industry 5.0
- H6: Anxiety has a constructive effect on effort expectancy of use of Cobots in Industry 5.0
- H7: Personal innovativeness has a constructive effect on performance expectancy of use of Cobots in Industry 5.0.
- H8: Personal effectiveness has a constructive effect on effort expectancy of use of Cobots in Industry 5.0.
- H9: Intention to use has a constructive effect on actual use of Cobots in Industry 5.0
- H10: Alignment among actors and structure has a constructive effect on actual use of Cobots in Industry 5.0
- H11: Alignment among actor and task has a constructive effect on actual use of Cobots in Industry 5.0
- H12: Alignment among actor and Technology has a constructive effect on actual use of Cobots in Industry 5.0
- H13: Alignment among task and Technology has a constructive effect on actual use of Cobots in Industry 5.0
- H14: Alignment among task and structure has a constructive effect on actual use of Cobots in Industry 5.0
- H15: Alignment among technology and structure has a constructive effect on actual use of Cobots in Industry 5.0
- H16: Actual use of Cobots has a constructive effect on perceived work performance improvement of Cobots in Industry 5.

2.1 Conceptual Model

Using the Unified theory of Acceptance and Use of Technology (UTAUT) and combining with Socio-Technology System (STS) model and along with anxiety and personal innovativeness which are the external variables to UTAUT, a conceptual model is formulated for the acceptance of collaborative robots in Industry 5.0.

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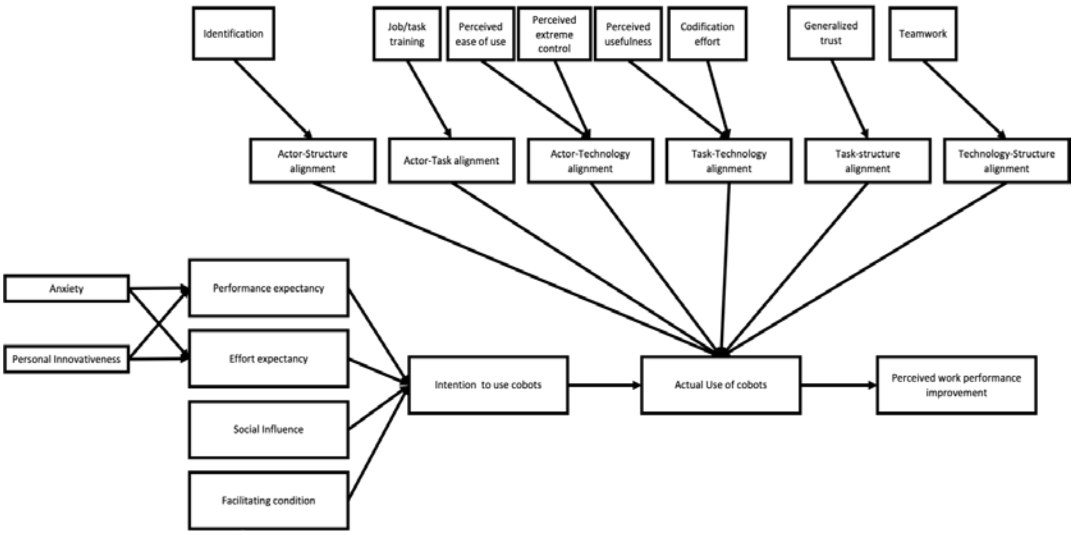

Figure 1: Conceptual Model

2.2 Research Design

A quantitative research method has been chosen in this study to construct the conceptual model based on the UTAUT model & STS model for the acceptance of Cobots in Industry 5.0. The quantitative research method emphasizes survey based approach for collection of data and further analysis of the data to find the correlations among the constructs and validate the hypotheses. The survey questionnaire was prepared based on questions collected from various related literature surveys.

2.3 Data Collection

Research data for the study has been collected through a survey. The self-completion server was designed on an online platform 'Google Form' and the same was floated through various platforms like e-mail, WhatsApp, Social Media etc. on a random basis. Study was conducted using questionnaires having 44 questionnaires collected from various literature out of which 7 questionnaires were used for collecting demographic details. The questions were asked on the factors of the conceptual model; anxiety, personal innovativeness, effort expectancy, performance expectancy, facilitating condition, social influence, intention to use Cobots, actual use of Cobots, perceived work performance improvement, actor-task alignment, actor-structure alignment, task-technology alignment, actor-technology alignment, task-structure alignment, technology-structural alignment. A 7 point Likert scale was used to collect the response of the questions. The sample size of the survey was 150 respondents. Data cleaning was done on the received responses and 128 responses were used for analysis and interpretation.

3 Results

3.1 Structural Equation Model (SEM), Indicator reliability, Internal Consistency, Convergent Validity and Test of Discriminant Validity

SmartPLS 4.0 software was used for the analysis in this study and the following results were obtained from the analysis. In the structural equation model the R squared value of effort expectancy, performance expectancy, intention to use Cobots, actual use of Cobots, percept work performance improvement are 0.461, 0.484, 0.616, 0.753 and 0.444. Which means that

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46.1% of performance expectancy is described by anxiety and personal innovativeness. 48.4% of effort expectancy is described by anxiety and personal innovativeness. 61.6% of intention to use Cobots is described by effort expectancy, performance expectancy, facilitating condition and social influence. 75.3% of actual use of Cobots is described by intention to use Cobots, actor-task alignment, actor-structure alignment, actor-technology alignment, task-structural alignment, task-technology alignment, technology-structure alignment. And finally 44.4% of perceived work performance improvement is described by actual use of Cobots. Collinearity Statistics (outer VIF values) was also done and the values of the factors were found satisfactory and less than 5.0. Cronbach's α, AVE-convergent validity, composite reliability and discriminant validity were considered in the measurement analysis. For the acceptance and reliability of the scale, the value of the Cronbach's α should be greater than 0.70. Obtained value of Cronbach's α in this analysis were more than 0.70. For convergent validity the minimum required value of Average Variance Extracted(AVE) is 0.50 and obtained AVE values are fulfilling the criteria. The criteria for discriminant validity for any latent variable the correlation between any other latent variable should be greater than the positive square root of AVE of any latent variable. In all the cases the criteria for discriminant validity has been fulfilled and the discriminant validity has been accepted for any two reflective constructs. For the acceptance and reliability of the measurement scale the correlation value should be less than 0.90 and it is found that correlation values between the variables are all less than 0.90.

3.2 Hypothesis Testing

To validate the hypothesis developed earlier in the study Bootstrapping analysis was done. For the validity of the hypothesis the p-value should be less than 5%. For the hypothesis H1, H2, H5, H9, H10, H14, H15 and H16 the p-value has been found less than 5%, so hypotheses are supported. For the hypothesis H3, H4, H6, H7, H8, H11, H12 and H13 the p-value found are more than 5% so these hypotheses are not supported. The study shows that effort expectancy and performance expectancy has a constructive effect on Intention to use Cobots. Also, social influence and facilitating conditions has no relationship with the intention to use Cobots. Anxiety has a constructive influence on performance expectancy but no effect on effort expectancy in case of acceptance of collaborative robots in Industry 5.0. Similarly personal innovativeness has no effect on either effort or performance expectancy. Intention to use Cobots and Actor-structure alignment have constructive effect on Actual use of Cobots, but Actor-technology alignment, Actor- task alignment, Task-technology alignment has no effect on Actual use of Cobots. Task-structure alignment and Technology-structure alignment has a constructive influence on Actual use of Cobots. And finally Actual use of Cobots has a constructive effect on Perceived work performance improvement.

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Table 1: Testing of Hypothesis		
Hypothesis	P values	Decision
H1: Performance Expectancy -> Intention to Use Cobots	0.045	Supported
H2: Effort Expectation -> Intention to Use Cobots	0.036	Supported
H3: Social Influence -> Intention to Use Cobots	0	Not Supported
H4: Facilitating Condition -> Intention to Use Cobots	0.425	Not Supported
H5: Anxiety -> Performance Expectancy	0.029	Supported
H6: Anxiety -> Effort Expectation	0.699	Not Supported
H7: Personal Innovativeness -> Performance Expectancy	0	Not Supported
H8: Personal Innovativeness -> Effort Expectation	0	Not Supported
H9: Intention to Use Cobots -> Actual Use of Cobots	0.009	Supported
H10: Actor-Structure Alignment -> Actual Use of Cobots	0.003	Supported
H11: Actor-Task Alignment -> Actual Use of Cobots	0.052	Not Supported
H12: Actor-Technology Alignment -> Actual Use of Cobots	0.526	Not Supported
H13: Task-Technology Alignment -> Actual Use of Cobots	0.47	Not Supported
H14: Task-Structure Alignment -> Actual Use of Cobots	0.035	Supported
H15: Technology-Structure Alignment -> Actual Use of Cobots	0	Supported
H16: Actual Use of Cobots -> Perceived Work Performance Improvement	0	Supported

4 Conclusion:

The study was focused on to find out the acceptance level of collaborative robots in Industry 5.0, because of the two reasons, one is increasing in the level of use of robots in industry and secondly to be prepared for the upcoming Industry 5.0, which is focused on synergy between human and robots and personalized mass production. Collaboration of human expertise with intelligent, efficient and accurate machines is the main motto in Industry 5.0. The model developed in this study is using the amalgamation of two models UTAUT & STS along with external variables to appropriately address the context of collaborative robots in Industry 5.0. The external variables are used based on the previous study, which has shown that they are the influencing factor for the variables of UTAUT model variables. The study shows that the performance and effort expectancy are the constructive factors for the intention to use Cobots as there are perceived benefits and ease of work when using Cobots. In the UTAUT model social influence and facilitating conditions are the influencing factors for the intention to use Cobots, but in actual study it is found that those two factors do not affect intention to use Cobots when tested along with performance and effort expectancy. That means the surrounding people of the respondent do not influence to accept Cobots in Industry 5.0. This indicates that being a future technology ‘Cobots’ and a future time-frame ‘Industry 5.0’ social influence and facilitating conditions are not relevant in the acceptance. The external variables anxiety and personal innovativeness are both external variables to the UTAUT model, in this study it came out that only anxiety affects the performance expectancy. Respondents are anxious about the perceived benefit of use of Cobots in Industry 5.0. From the study it was found that structure of the systems in the organization are very important as the structure’s relationship with actors, task and technology are all influencing the actual use of Cobots. With

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proper alignment of systems in the organization the actual use of Cobots can be achieved. Finally, actual use of Cobots is an influencing factor for perceived work performance improvement.

4.1 Future research and limitations:

Study was conducted best on the data collected within India on a random basis, where the people are not accustomed with the actual working of Cobots or Industry 5.0. A future study can be conducted based on the same theoretical framework and data collected from the people having the actual work experience with Cobots and Industry 5.0. Also, further in depth study can be conducted in the context of developed countries where the industrial revolutions are prominent. In the current study responses have been collected from the respondents from mixed sectors. A study can be conducted for acceptance of Cobots related to a specific industry. In the current study most of the respondents have work experience in the range of 0-5 years and 6-11 years. A study can be conducted with the respondents having evenly spread work experiences.

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Price Stability and Monetary Policy in India

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Abstract
Price stability is essential to the growth of an economy as it refers to maintaining the purchasing power of money which people hold in different forms without getting affected by inflation or deflation, thereby not changing the real value of a country's currency. Ensuring this crucial principle is one of the primary objectives of any monetary policy practised by monetary authorities around the world. The monetary authorities exercise multiple monetary policy tools like interest rates, open market operations and forex reserves to control the money supply in order to regulate the price level in the economy. This paper employs running a regression model using the ordinary least squares (OLS) method of estimation to analyse the relationship between price stability and monetary policy tools exercised by the monetary authority in this case Reserve Bank of India which resulted in ascertaining that few monetary policy tools have a considerable significance level to affect the price stability of the nation.

Keywords: Price stabilisation; purchasing power, monetary policy; regression model

BACKGROUND OF THE STUDY
Milton Friedman, an Economics Nobel laureate said "inflation is always and everywhere a monetary phenomenon", where he meant that increase in money supply or an increase in growth in money supply were prerequisites for inflation. He based it on the quantity theory of money. At present almost all the monetary authorities around the globe are practising inflation targeting monetary policy wherein price stability is the chief goal.

The Indian monetary authority, the Reserve Bank of India is responsible for conducting monetary policy in India with the primary objective of maintaining price stability while keeping in mind the objective of growth, according to the RBI Act,1934 (as amended in 2016). But before the current inflation targeting regime the monetary policy of India evolved with different operating procedures.

In the initial phase before 1950, mainly before independence, RBI conducted its policy by regulating liquidity for maintaining sterling parity with the use of bank rate, cash reserve ratio and open market operations. From 1950-1970 immediately after the independence, the main objective was to align with the 5-year plans in support of the government's planned economic development by regulating credit through bank rate, reserve requirements and open market operations. From 1970 to 1985 that is after the first move of nationalisation of banks the driver of monetary policy was credit planning. During this period RBI faced challenges in tackling rising inflation due to various uncertainties and credit expansion. In the 1980s RBI adopted monetary targeting as a monetary policy framework on recommendations of the Chakravarty Committee (1985). In this period the objective was to control inflation by controlling monetary expansion by employing reserve money(M0) as the operating target and broad money(M3) as the intermediate target. From 1998 RBI took on the Multiple indicator approach for monetary policy where it was not limited just by monetary aggregates but included many other indicators such as capital flows, exchange rate, credit, trade, output, inflation etc. Also, this period witnessed shifts from direct to indirect policy instruments like

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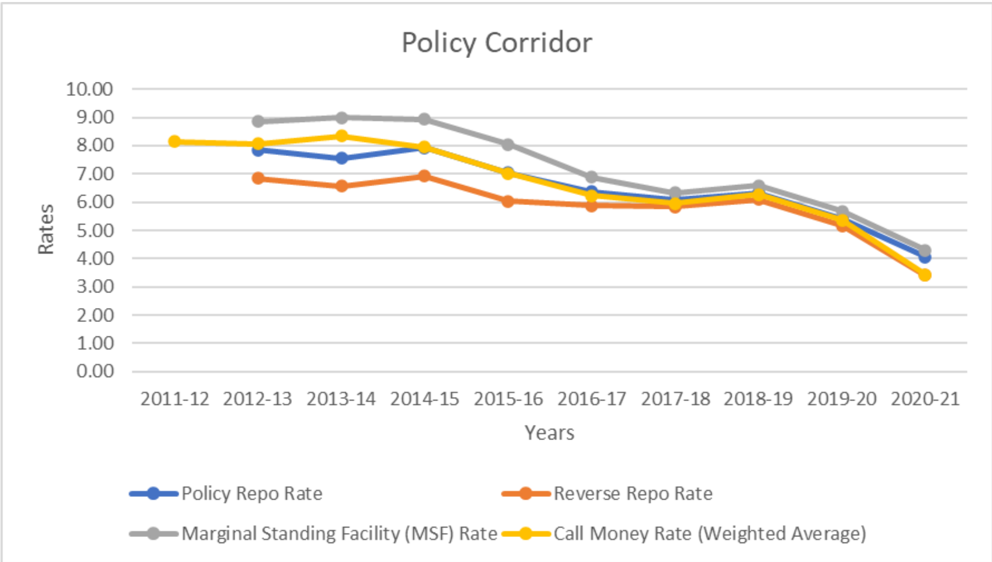
rate channels. During this period RBI also introduced Liquidity Adjustment Facility (LAF) upon recommendations from Narasimham Committee II (1998) which was operated through overnight fixed repo and reverse repo rates. But there was a lack of a single policy rate.

The new operating procedure adopted by RBI in 2011 resolved the issue of the lack of a single policy rate by adopting the repo rate as one. Here the operating target was chosen as the weighted average overnight call money rate and the repo rate was the only independently varying rate policy rate. The rates corridor was assigned as 200 bps width, with Marginal Standing facility (MSF) 100bps above repo rate and Reverse repo rate 100bps below it. The graph of the rate corridor also known as policy corridor from 2011-12 to 2020-21 is drawn in Fig1, which is drawn with the data collected from RBI Publications, Weekly statistical supplement 2011-12:2020-21



Source: Author's compilation from RBI Publications, Weekly statistical supplement 2011-12:2020-21

Fig1: Policy corridor

After 2011 few changes were done to the liquidity adjustment framework corridor in 2014 and 2016. According to a report in 2014, RBI chose inflation as the nominal anchor of monetary policy and from 2016 onwards is following a flexible inflation targeting framework for monetary policy where the primary objective is price stability with consumer price headline inflation as 4% with a tolerance band of +/- 2%.

OBJECTIVE OF STUDY

The objective of this research paper is to analyse how the monetary policy of RBI impacts price stability especially after adopting a single policy rate in 2011 and moving towards an inflation targeting approach there onwards. In addition, it also analyses and compares the impact of monetary policy indicators namely, the monetary aggregate channel and rate channel on price stability. This paper primarily answers two questions:

i)What is the effectiveness of the monetary policy on price stability from 2011?

ii)Which monetary policy instrument tool monetary aggregate or rate channel’s has more impact on price stability?

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LITERATURE REVIEW

The impact of monetary policy via monetary aggregate channel (quantum variable) and rate channel (rate variable) on price stability especially food prices is explicitly understood through Khundrakpam and Das(2011), Monetary Policy and food prices in India. They employ Vector Error Correction (VECR) model to analyse the relative response of food and manufactured prices to change in interest rates and money supply for the period 2001Q1:2010Q2 where the data is collected from RBI. In the study, the interest rate is a rate variable and the money supply is a quantum variable. Here the natural logarithmic values of all concerned variables are taken for data analysis. They have taken Weighted Average Call Rate (WACR) as a proxy for the policy rate, M3 (Broad Money) for money supply and WPI (Wholesale Price Index) for the level of prices. The study states that the M3 has a positive impact on the level of prices, and has a statistically significant effect on the level of food prices. The study also states that the WACR has a negative impact on the level of prices and a statistically significant effect on manufactured prices.

The change in the framework of RBI's monetary policies led to different levels of effectiveness in maintaining price stability over the years, which can be understood through Bhatia(1961), The Role of Monetary Policy in Price Stability: The Indian Case 1951-59, if compared to present stances of RBI. The study examines the impact of monetary policy on price stability during the first decade of independence using descriptive analysis for data collected from RBI for the period 1951-59. As mentioned in the background of study of the present paper this paper also states that the driver of monetary policy then was to align with the government's support for economic development with 5-year plans. The monetary policy according to the paper states that RBI used foreign assets to offset the fiscal deficit financing in order to maintain price stability. According to the paper, from 1957, RBI practised contractionary monetary policy to control the inflationary trend. In 1957-58 RBI raised bank rate and issued directives regarding credit ceilings to offset the increase in money supply to maintain price stability.

Emerenini, Fabian M. (Ph.D) Eke, Charles N(2014):The Impact of Monetary Policy Rate on Inflation in Nigeria applies the Ordinary Least Squares method(OLS) regression estimation method to study the impact of monetary policy instruments like broad money supply, annual treasury bill rate, exchange rate and monetary policy rate on the inflation rate for the period January 2007 to August 2014. The data is collected from the Central Bank of Nigeria.The inflation rate was measured through CPI (Consumer Price Index). The study examines the impact on the inflation rate after the Central Bank of Nigeria changes its monetary policy instrument to maintain price stability from the minimum rediscount rate to the monetary policy rate. It states that to avoid the problem of autocorrelation it transforms the regression equation using a natural logarithm.The major findings of the study were that monetary policy rate did not have any statistically significant effect on inflation while expected inflation, Money supply and exchange rate had influence on inflation.

DATA AND METHODOLOGY

The ordinary Least Squares method will be employed to ascertain the relationship between price stability and monetary policy instruments namely interest rate and monetary aggregate (money supply). OLS regression estimation is used for its Best Linear Unbiased estimator (BLUE) property. The price stability is measured through CPI Combined General Index. As RBI uses CPI to measure headline inflation and as it captures economy-wide inflationary

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pressures. The money supply is taken as Broad Money (M3) as it is used by RBI and most economists as a measure of the money supply. The interest rate channel which currently is aimed at Repo rate, a proxy for it is taken through Weighted Average Call Rate (WACR) which is the operating target for monetary policy as it is best reflective of liquidity mismatches in unsecured overnight money market and also the Repo rate and WACR are aligned almost on the same line as observed in Fig1. The data is collected for these variables for the period 2011-12 Q1:2020-21 Q4. It is collected from RBI publications, for CPI and M3 from the annual handbook of statistics on Indian Economy monthly series and WACR from RBI weekly statistical supplement. Hence the variables for regression analysis are as follows:

1. CPI (Consumer Price Index)
2. WACR (Weighted Average Call Rate)
3. M3 (Broad Money)

Model specification:

The regression equation for which OLS estimation is employed to estimate the relationship between the dependent variable, CPI and independent variables WACR and M3 is as follows:

CPI=f(WACR M3)

$$\mathbf{CPI_t = \beta_0 + \beta_1 WACR_t + \beta_2 M3_t + \mu_t}$$

The regression equation is transformed using a natural logarithm for estimation purposes.

$$\mathbf{lnCPI_t = \beta_0 + \beta_1 lnWACR_t + \beta_2 lnM3_t + \mu_t}$$

RESULTS AND DISCUSSIONS

Table 1: OLS Regression estimation results

Variable	*Coefficients*	*Standard Error*	*t Stat*	*P-value*
Intercept	5.007951751	0.113109886	44.2751	1.18E-33
WACR	-0.217651727	0.036602444	-5.94637	7.42149E-07
M3	0.019181603	0.00384306	4.991231	

Source: The Author

Table 2: Other regression statistics

Regression Statistics	*Values*
Multiple R	0.933688636

R Square	0.871774468
Adjusted R Square	0.864843359
Standard Error	0.039351135
Observations	

Source: The Author

The estimated regression equation is as follows:

$lnCPI_t = 5.0079 - 0.2176lnWACR_t + 0.0191lnM3_t$

Interpretation:

From Tables 1 and 2 the following interpretation is made. The R^2 value of 0.8717 indicates that the independent variables WACR and M3 are responsible for 87% of the total variation in the dependent variable CPI. The adjusted R^2 value tells us about the goodness of fit of the model with respect to newer independent variables. Here the adjusted R^2 value of 0.8648 or 86% means that the independent variables included in the equation explain variation in the dependent variable not just by chance and avoid misspecification errors (including independent variables under or over the adequate level making the regression equation biased). The standard error value of 0.0393 or 3.9% tells us that the observed values from the regression line are very close to it. The coefficient of Weighted Average Call Rate (WACR) is -0.2176 with p-value of less than 0.05 indicating a statistically significant negative relationship between WACR and CPI. So, if there is an increase in WACR by 1% the CPI decreases by 0.22%. This is in line with the results of Khundrakpam and Das(2011), where the level of prices has a negative relationship with WACR. The coefficient of Broad Money(M3) is 0.0198 with p-value of less than 0.05 indicating a statistically significant positive relationship between M3 and CPI. So, if there is an increase in M3 by 1% the CPI would increase by 0.02%. This is in line with the results of Khundrakpam and Das(2011), where they established the fact that M3 and the level of prices have a positive relationship.

CONCLUSION AND RECOMMENDATION

This paper analyses the relationship between price stability and monetary policy for the period 2011-12Q1:2020-21Q4. The role of monetary policy is analysed using two variables: rate and monetary aggregate. It employs the Ordinary Least Squares method of regression model on three variables CPI (Consumer Price Index), WACR (Weighted Average Call Rate) and M3 (Broad Money). The key questions it aims to answer are i) What is the effectiveness of the monetary policy on price stability since 2011? ii) Which monetary policy instrument tool direct(monetary aggregate) or indirect(rate channels) has more impact on price stability? The results showed that both the monetary policy indicators: interest rate and money supply have a significant effect on the price level with R^2 of 93%. This leads us to conclude the effectiveness of the monetary policy on price stability. The WACR coefficient is greater than that of M3 if the modulus value of coefficients is compared. Hence, we can conclude that the interest rate channel than the money aggregate channel has more impact on the price stability. According to the study, the chief recommendation to the RBI is that it must use the necessary

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means to control the money supply (broad money) and use interest rates (repo rate through WACR) appropriately to meet its primary objective of price stability as both the variables are significant in impacting the level of prices in the economy (CPI).

SCOPE FOR FURTHER STUDY

The chief purpose of the paper is to study the relationship between price stability and monetary policy in India. The present paper achieves that through analysing the impact of monetary policy on price level from 2011 that is after RBI made the Repo rate as the single policy rate and moved towards inflation targeting policy then-onwards. To analyse that relationship WACR and M3 are taken to represent the interest rate channel and money supply. The analysis dwells on the time period after 2011, taking just two variables out of many monetary policy instruments. To obtain a more comprehensive outlook of how price stability was maintained with the use of monetary policy, a study involving more monetary policy instruments under different monetary policy regimes needs to be done.

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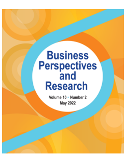

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