(ISSN 0971-1864)

The Journal of Institute of Public Enterprise

Estd : 1964

SPECIAL ISSUE Jan-Jun 2024

Under UGC Care List

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The Journal of

Institute of Public Enterprise

Aims and Scope

The Journal of Institute of Public Enterprise is a peer-reviewed journal devoted to publication of professional and academic research on the policy and functional facets of public sector enterprises, public policy and public systems. The aim of the journal is to provide a platform for researchers, academicians, practitioners and policy-makers from diverse sectors to stimulate scholarly debate in the contemporary issues and emerging trends in Public Policy, Public and Private Enterprise Management, Joint Ventures, Public Administration, Privatization and Disinvestment both in India and abroad.

- The views expressed in this publication are those of the individual authors and do not reflect the views of the Institute of Public Enterprise.

- The publication of the Journal of Institute of Public Enterprise is supported by the grant received from Indian Council of Social Science Research (ICSSR), Ministry of Education, Government of India, New Delhi.

Published, Printed & Owned by: Institute of Public Enterprise, Hyderabad.
Place of Publication: Institute of Public Enterprise, Hyderabad.

(For information concerning the preparation of paper, see inside back cover)

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Editorial

In today's rapidly evolving business world, organizations must stay agile and responsive to change in order to thrive. Rapid technological advancements, shifting market trends, and evolving customer expectations demand that businesses continually adapt and innovate. Success now relies on organizations fostering a culture of continuous learning, encouraging collaboration, and leveraging data-driven insights to make informed decisions. By embracing change, investing in employee development, and maintaining a focus on customer-centric solutions, businesses can navigate complexities, seize new opportunities, and remain competitive in an ever-dynamic environment.

The 2023 National Conference on "NextGen Business Strategies and Marketing Dynamics: Innovate, Adapt, Succeed" (NBSMD) hosted by the Institute of Public Enterprise (IPE), Hyderabad, offered a timely and robust forum for addressing these challenges.

As international markets and consumer expectations shift, industry leaders and marketers are under continuous pressure to stay ahead, make data-driven decisions, and leverage emerging technologies.

NBSMD 2023 gathered a diverse assembly of experts from academia, industry, and the entrepreneurial sector, each contributing to a dynamic exchange of ideas.

The topics covered were both expansive and urgent, reflecting the interplay of strategy, technology, and cultural forces that shape the business environment. Cutting-edge tools such as AI, AR and advanced analytics were also highlighted for their potential in decision-making and consumer insight.

The conference themes on Strategy and Marketing, stood out for their relevance and resonance, underscoring the necessity for agility, especially in industries increasingly dominated by e-commerce and digital interactions.

Papers presented and published in this journal issue covers, Change Management - emphasizing successful leadership to not only anticipate change but actively drive it; Innovation and creativity in entrepreneurship, as it is reshaping the traditional business models and driving growth.

Covers critical social dynamics, such as, Gender Inclusion and Cross-Cultural Management - essentially fostering a culture that embraces different perspectives and drives innovation; Corporate Social Responsibility (CSR) and Corporate Governance with increasing focus on long-term value and environmental responsibility; Spirituality in Organizations/Spiritual Empowerment, for today's holistic leader's acumen in challenging times, need to be not only strategic but also emotional, where empathy, self-awareness, and ethical grounding are as crucial as traditional business skills. contains

On the technical front, themes such as AI and Automation in Marketing, Technology and Cyber Innovation, and Future Trends in Marketing are pertinently discussed given the rapid pace of technological advancements, reshaping customer relationship management, brand strategy, and consumer engagement.

The exploration of International Economic Competitiveness and the Geopolitical Environment further illustrates the strategic business alignment to not only economics but also political forces on the global stage.

NBSMD 2023 underscored the importance of staying adaptable, continually innovating, and recognizing the broader social and technological currents that shape the market landscape.

This special issue of the *Journal of Institute of Public Enterprise* captures the insights, research, and dialogue from NBSMD, serving as a valuable resource for all professionals committed to navigating and leading in this new era of business.

As the global marketplace continues to shift, IPE remains dedicated to fostering research, dialogue, and collaboration across the diverse facets of business. We hope that this special issue will inspire readers to innovate, adapt, and succeed in their respective fields.

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 1-13

Emerging Trends and Opportunities in Startups in India – with a Special Focus on Fintech

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Prachi[2]

Abstract

In the ever-evolving landscape of business and innovation, startups emerge as the trailblazers, embodying the essence of entrepreneurial spirit and risk-taking. Startups are the new emerging trends in global world economy. A startup is more than just a business it's a testament to the courage and vision of individuals who dare to dream beyond the conventional. At its core, a startup is a journey, marked by innovation, adaptability, and an unwavering commitment of transforming ideas into reality. The term startup was coined in early tech revolution in 1970s, referring to new breed of companies which have great growth potential. Startup has been in trend since last 2 decades. According to Microsoft news there are over 150 million startups in the world and every year 50 million new startups emerge globally. Studies show that only 20% of startups are able to survive for more than 5 years and only 8% manage to survive beyond 10 years (24th March 2023, Economic Times). India has now emerged as 3rd largest ecosystem for startups as of 31st May 2023. According to Jitendra Singh, Minster of State for Science and Technology addressing the National Innovation Awards event at Rastrapati Bhavan in New Delhi, country was home to just 350 startups before 2014 which has now increased to 99,000 in the year 2023. This data clearly depicts that Startups have grown exponentially, mounting 300 times in the past 9 years. According to the global entrepreneurship Monitor (GEM), an estimated 305m startups are created annually. In 2023, there are an increasing number of startups focused on Fintech, AI, Blockchain technology, and data management. In the present global scenario it is quite evident that startups have become major part contributing to National Economy. However, the success rate

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of startup at the global level stands at only 8%. According to Piyush Goyal, Union Minister the success rate of startups in India is relatively high than rest of the world. To boost up the Startup trends the Government of India launched the Startup India initiative in the year 2016 and extended support to startups at various stages of business cycle. The Startup India Seed Scheme has been approved for four years starting from 2021-22 and is being implemented with a corpus of Rs 945 crore. The present study is dedicated to comprehending the adoption of fintech in making a startup successful. Interestingly, the role of Govt., Universities, Family, and other factors in supporting and promoting startups as a career amongst the students, an attempt to understand the collaborative efforts contributing to the overall success rate of startups in India.

Keywords: Ecosystem, Fintech, Government Initiatives, Startups, Startup India Initiatives, University Initiatives

Introduction

The state of Start-ups in 2023 can be considered to be very interesting and compelling Dynamic. There has been a significant increase in investments, with Global Venture capital reaching $540 billion in the year 2022, and this trend has persisted in 2023. Start-ups represent a burgeoning trend in the global economy, gaining prominence as a new and emerging force. A Start-ups constitutes a transformative journey defined by innovation, adaptability, and an unwavering commitment to turning conceptual ideas into tangible reality. The way to become a successful Start-ups is not smooth with 90% failures. The current challenges, such as escalating inflation and interest rates, are adding to the complexity of sustaining Start-ups in the present scenario. The recently released **Global Startup Economic Report 2023** (GSER 2023) by Startup Genome emphasizes the continued dominance of top 3 Startup ecosystems – Silicon Valley, New York and London since 2020. Notably Boston and Beijing have dropped out of the top 5, making way for Los Angeles and Tel Aviv to claim 4th and 5th place respectively.

India has now emerged as 3rd largest ecosystem for startups as of 31st May 2023. According to, **Global Startup Economic Report 2023** in the global scaleup landscape, India holds the fourth position in the number of startups that have secured over $50 million in disclosed venture capital investment with Number of scaleups at 429, Total Venture capital investment raised at $127bn and Tech Ecosystem value at $446bn. Outpacing India in this ranking are the USA, China, and the UK. The report additionally notes that India boasts startups where 50% or more of their customer base originates from beyond the continent, and these startups exhibit the highest scaleup rate. In the contemporary global landscape, the Global Entrepreneurship Monitor (GEM) reports a staggering annual creation of approximately 305 million startups. Notably, the year 2023 witnesses a discernible surge in the establishment of startups with a distinct focus on cutting-edge sectors such as Fintech, Artificial Intelligence (AI), Blockchain technology, and data management. This phenomenon underscores the pivotal role that startups play as significant contributors to national economies worldwide.

Despite the allure of success, the path to establishing a thriving startup is fraught with challenges, with a daunting 90% failure rate. This study is dedicated to exploring the pivotal role of fintech adoption in the success of startups. Fintech, an amalgamation of finance and technology, has emerged as an important force, revolutionizing traditional financial services. Fintech represents a seismic shift in the financial industry, introducing innovative solutions and reshaping the way financial transactions are conducted. Understanding the dynamics of fintech startups provides valuable insights into the technological advancements that are influencing the financial sector's core functions. From digital payments to blockchain-based solutions, fintech startups are at the forefront of creating efficiencies and enhancing user experiences.

The research aims to delve into the multifaceted support mechanisms provided by various stakeholders, including the government, universities, and family, among other factors. Specifically, the focus is on understanding how these entities collectively foster an environment conducive to promoting startups as a viable career option among students. By examining the collaborative efforts of these diverse elements, the research seeks to gain insights into the comprehensive factors that contribute to the overall success rate of startups in the dynamic entrepreneurial landscape of India. Therefore the objective of the present study is to understand the challenges encountered by Startups on their path to success and ways to overcome such challenges and the role of Fintech in success of startups.

Review of Literature

Munira Aminova, Edoardo Marchi (2021) – This study was done to investigate key variables that impacts the performance of startups and contribute to their survival. The impact of innovative strategies such as new products, new markets, new ideas, and patents were thoroughly analyzed. The paper used the database of ZEW with 60.000 observations for 7 years (2007-2016). The study used quantitative research methods. The results show that innovation is positively correlated to the performance of startups. Variables such as investment, industry, start-up size, founder's education, and employees' educational level have effect on startups' innovations and contribute to improving their performance. On the other hand, there was no correlation between start-ups' incubators and performance.

Ankur Singh Bist (2023) – This study was held in Indonesia. It is well known fact that College is a fantastic location to gain solid entrepreneurship skills because it fosters creativity so students can create their own businesses. Nevertheless, obstacles exist in the establishment of businesses, encompassing constraints in technology, management, and leadership capabilities.. As a result, study was held to investigate how business incubators help colleges create firms. Qualitative methodology was used to conduct the study at Raharja University's Alphabet Incubator. According to this study, business incubators are crucial for universities in fostering student entrepreneurship and innovation.

***Ploypailin Kijkasiwat (2021*)** – This study is focused on assessing the prospects and challenges encountered by Fintech startup enterprises, employing Thailand as a focal point. A comprehensive methodology was employed, incorporating secondary data derived from the Thailand Fintech Association and primary data gathered through structured interviews. The findings underscore that collaborative efforts are required, whether within similar or diverse business environments, present optimal growth opportunities for startup firms in Thailand. Moreover, the study establishes a correlation between digital literacy, financial literacy, and financial inclusion. Conclusively, the study advocates for the formulation of strategic policies by the Thai government and relevant authorities to facilitate the growth of Fintech startups. Additionally, emphasis is placed on the crucial need for the implementation of robust security systems to safeguard users against illegal digital transactions within the Fintech sector. The recommendation extends to fostering collaboration between banks and Fintech entities, leveraging their respective expertise to mutually reinforce opportunities and mitigate potential threats.

Tom Eisenmann (2021) – Embarking on a business venture is inherently fraught with challenges, as evidenced by the sobering statistic that nearly two-thirds of start-ups fail to generate a positive return. Intrigued by this formidable reality, a professor specializing in entrepreneurship at Harvard Business School conducted a thorough investigation to uncover the underlying reasons behind such high failure rates. Through a meticulous examination involving interviews, surveys encompassing a diverse array of founders and investors, and an extensive analysis of narratives detailing entrepreneurial setbacks, this study challenges the prevailing notion that the primary culprits behind start-up failure are either the founding team or the business idea. Instead, the research reveals six recurrent patterns that consistently contribute to the downfall of entrepreneurial efforts. They are bad bed fellows, false starts, false positives, speed traps, help wanted and cascading miracles.

Hajer Zarrouk, Teheni El Ghak and Abderazak Bakhouche (2021) – This study explores the key determinants impacting the performance of FinTech ventures based in the UAE. The analysis encompasses various factors, with a focus on the FinTech's hedonics, including the business model, access to finance, and the overall business ecosystem framework. Data was collected through a semi-structured questionnaire administered to 32 FinTech founders. A qualitative analysis, employing an ordered logistic regression model, was conducted. The results indicate that the availability of resources, particularly through venture capital, plays a crucial role in the success and sustainability of FinTech microbusinesses. However, obstacles such as financial barriers, regulatory conditions, and legal issues negatively affect the establishment and growth of FinTech ventures. Additionally, dimensions of the business model, such as "product/service offering" and "value proposition," emerge as influential factors in determining the success of these ventures. The empirical findings of the model aim to provide a data-driven tool for finance policymakers to make informed decisions in promoting this emerging sector.

José Santisteban and David Mauricio (2021) – The study was conducted to identify Critical success factors for Technology based startups. The research employed a descriptive approach, analyzing the perspectives of 125 CEOs from technology-based startups in Peru using a student's t-test. The study revealed several significant relationships, including the impact of technological surveillance on knowledge absorptive capacity, the influence of knowledge absorptive capacity on the perceived performance of a product and/or service, its correlation with dynamic capability, and its association with an innovative and entrepreneurial culture.

Christian Haddad, Lars Hornuf (2021) – The study was conducted to examine the impact of Fintech startups on performance and default risk of traditional financial institution. It was found that when more fintech companies start up, traditional banks actually do better. This was observed from 2005 to 2018, looking at a large number of financial institutions in 87 different countries. The study also looked at whether fintech start-ups make traditional banks more or less likely to face financial problems. It turns out that when fintech start-ups are around, regular banks become less risky. The stock market becomes less unpredictable for regular banks, and the overall risk for the whole financial system goes down. In simple terms, the findings suggest that those in charge of making financial rules and keeping an eye on things should pay attention to fintech start-ups. These new companies don't just make the financial system work better; they also make it more stable than it was before.

***Anastasia Kusumaningtyas, Edgar Bolo, Istianah, Steward Chua, Mahendra Wiratama and Nyayu Lathifah Tirdasari (2021)* –** This study focused on why start-ups fail, analysing five cases from market mismatch to team conflicts. The goals were to identify common failure factors, understand challenges faced by start-up leaders, and propose risk-minimizing solutions. Findings highlighted issues like inadequate funding and mismatched products. Solutions for early start-ups include focusing on value, aligning skills with offerings, maintaining income streams, seeking mentorship, and avoiding unnecessary expenses.

Concept of Startups

Startups are newly established businesses that are epitome in innovation, scalability, and a inclination for rapid growth. It is typically founded by entrepreneurs seeking to capitalize on unique opportunities or address unmet needs, startups operate across diverse industries, ranging from technology to healthcare. Important attributes include a commitment to innovation, focus on scalability to accommodate rapid expansion, and a willingness to take calculated risks. Entrepreneurs, driven by vision and passion, lead startups, infusing them with an unmistakable entrepreneurial spirit. Resourcefulness is the most essential aspect as startups often commence operations with limited financial backing and a small team. Adaptability is a cornerstone, as startups must navigate dynamic environments, responding to changes in the market, technology, and consumer preferences. Venture capital often plays a pivotal role, with startups securing funding from investors in exchange for equity. Maximising technology is a common theme, as startups frequently integrate innovative solutions into their products or services. A customer-centric approach underscores their operations, with a keen focus on understanding and meeting the needs of their target audience. Engaging with supportive ecosystems, such as mentorship programs and accelerators, is integral to many startups' journeys, providing invaluable resources and guidance. In essence, startups represent dynamic, disruptive entities that, when successful, contribute significantly to industry evolution and economic growth.

Concept of Fintech

Fintech is a mix of "financial" and "technology," it captures the innovative application of technology to reshape and optimize financial services. This dynamic field spans a spectrum of advancements that revolutionize traditional financial practices. Digital payment systems, mobile banking applications, and peer-to-peer lending platforms exemplify the transformative power of fintech, enabling swift and secure financial transactions. Blockchain technology, the backbone of cryptocurrencies like Bitcoin, has introduced decentralized and secure transaction recording, challenging conventional financial systems. Robo-advisors, powered by algorithms, automate investment management, providing cost-effective and efficient alternatives to traditional advisory services. Insurtech leverages technology to enhance the insurance sector, streamlining processes and improving customer experiences. Regtech employs technology to facilitate compliance with financial regulations, offering solutions for risk management and monitoring. Artificial intelligence and machine learning are harnessed for tasks such as credit scoring, fraud detection, and personalized financial recommendations. Crowdfunding platforms, another facet of fintech, enable diverse fundraising models, from peer-to-peer lending to equity crowdfunding. As fintech continues to evolve, its impact challenges established financial norms, presenting opportunities for innovation while prompting considerations of privacy, security, and regulatory adherence.

Startup Positions in India

According to Invest India, India is making significant strides in innovation, securing the 2nd spot globally for innovation quality, particularly excelling in scientific publications and university standards among middle-income nations. The startup scene in India has witnessed remarkable growth from 2015 to 2022, with a 15-fold increase in total funding, a 9-fold rise in the number of investors, and a 7-fold increase in incubators. The emergence of Indian Unicorns, valued startups, is notable, with 111 unicorns and a total valuation of $349.67 billion as of October 3, 2023. The unicorn growth has been exponential, with a 66% Year-on-Year increase since FY 2017-18. In 2021, 45 unicorns worth $102.30 billion were born, followed by 22 unicorns valued at $29.20 billion in 2022. The latest addition in 2023 is Zepto. These startups span diverse sectors, from IT services to healthcare, education, agriculture, and food & beverages, making a substantial impact not only in innovation but also in employment generation.

Venture Capital Invest

Country	No. of Scaleups	Total VC Investment Raised	Tech Ecosystem Value
US	$7184	$1.4tn	$11tn
China	$1491	$195bn	$3tn
UK	$623	$111bn	$430bn
India	$429	$127bn	$446bn
Canada	$269	$39bn	$235bn

According to a report from Startup Genome India ranks fourth in the world in the number of startups that have received $50 millions of VC investment. Ahead of India lie US, China and UK respectively.

Challenges Faced by Startups

There is a saying that "Survival of the Fittest", this saying goes for Startups too. A Startup needs to face many challenges from surviving to excelling in an industry. Startup needs to overcome these challenges to position it self in the business market. There are several challenges faced by newly launched startups such as Fierce competition, unrealistic expectation, hiring suitable candidates, partnership decision making, financial management, cyber security and winning trust of customer.

Every year countless startups are launched but only few survive to become successful. Studies show that only 20% of startups survive for more than 5 years and only 8% manage to survive for more than 10 years. Clearly the data shows that it is hard for a startup to survive for a long run. Some challenges faced by startups in India are listed below:

Regulatory Complexity

Startups in India grapple with a complex regulatory environment characterized by bureaucratic hurdles and compliance issues. Navigating through intricate legal procedures can be time-consuming and resource-intensive, posing a significant challenge for emerging businesses.

Funding Accessibility

While there has been an overall increase in funding, early-stage startups often face difficulties in accessing capital. Securing financial support remains a significant challenge, limiting the growth potential for many startups and potentially hindering innovation.

Intense Market Competition

Certain sectors, notably IT services, experience fierce competition, necessitating startups to carve out a unique niche to thrive. Standing out in crowded markets becomes crucial, requiring innovative strategies and differentiation to capture market share.

Infrastructure Constraints

Both digital and physical infrastructure limitations pose challenges for startups. Insufficient technological infrastructure and logistical challenges can impede operational efficiency, hindering the scalability of startups, particularly those reliant on robust digital frameworks.

Talent Acquisition and Retention

Recruiting and retaining skilled talent is a persistent challenge. Startups often compete with established companies for the same pool of qualified professionals, making it challenging to build and maintain a talented workforce vital for innovation and growth.

Rapid Market Dynamics
Adapting to rapidly changing market dynamics poses a challenge for startups. The business landscape evolves swiftly, and startups need to remain agile to stay ahead. Those unable to adapt may struggle to meet shifting consumer demands and technological advancements.

Solutions to the Above Problem

Regulatory Complexity
Enhancing regulatory transparency and streamlining procedures can alleviate the burden on startups. Government initiatives to simplify compliance processes and provide clear guidelines can foster a more conducive environment for business growth.

Funding Accessibility
Encouraging a supportive ecosystem for investors and startups, along with government-backed funding programs, can improve funding accessibility. Establishing venture capital networks, angel investor platforms, and fostering collaborations between financial institutions and startups can facilitate smoother capital flows.

Intense Market Competition
Startups can tackle market competition by focusing on unique value propositions and niche markets. Emphasizing innovation, customer-centric approaches, and effective marketing strategies can help startups differentiate themselves, attracting and retaining a loyal customer base.

Infrastructure Constraints
Investing in improving both digital and physical infrastructure is essential. Governments and private entities can collaborate to enhance technology infrastructure, and logistical challenges can be addressed through strategic partnerships and investments in transportation and supply chain solutions.

Talent Acquisition and Retention
Creating an attractive work environment, offering competitive salaries, and providing opportunities for skill development can aid in talent acquisition and retention. Establishing partnerships with educational institutions can also help nurture a pipeline of skilled professionals.

Rapid Market Dynamics
Encouraging a culture of adaptability and innovation within startups is crucial. Regular market research, staying updated on industry trends, and

fostering a flexible organizational culture can help startups proactively respond to changing market dynamics and seize emerging opportunities.

Role of Fintech in Success of Startups in India

The fintech sector in India has experienced remarkable expansion in recent years, fueled by widespread internet access and smartphone usage. A report from the Ministry of Commerce and Industry highlights that a significant 40% of the world's digital transactions take place in India. The country's fintech industry has been a driving force behind this achievement. Recognizing the pivotal role of financial services in a modern economy, India has embraced fintech to extend these services to millions of underserved citizens across the nation. The high penetration of internet connectivity and smartphones has been instrumental in the evolution and widespread adoption of fintech in India, showcasing its transformative impact on the financial landscape.

Evolution of Fintech in India

The evolution of Fintech in India traces back to 2016, a pivotal year marked by the demonetization of 500 and 1000 rupee currency notes. Although some fintech players were already present, the country predominantly operated in a cash-based economy. The demonetization drive prompted an influx of new players into India's fintech landscape. Initially met with reluctance, the shift towards digital modes of payment gained momentum as people recognized the convenience, safety, and flexibility they offered in the absence of cash. The advent of Unique Payment Interface (UPI) further transformed the fintech sector.

What began as a simple digital transaction method rapidly expanded into a robust sector within the economy. In less than five years, a diverse array of fintech services emerged, including digital lending, online KYC, digital insurance, digital microfinance, buy-now-pay-later, and branchless banks. As of 2021, India's fintech industry was valued at $50 billion, and projections suggest it could reach $150 billion by 2025. The sector now boasts over 6000 fintech startups providing a wide range of services, with a remarkable adoption rate of 87%, surpassing the global average of 65%. The influence of fintech is compelling traditional banks, typically resistant to change, to embrace digital technologies. Many traditional banks are forming partnerships with fintech startups to stay competitive in this rapidly evolving landscape.

Reasons for Growth of Fintech in India

The success of India's fintech industry can be attributed to various factors. The widespread use of the internet and smartphones among Indians has played a pivotal role in this achievement. The Indian government's initiatives, such as promoting a cashless economy and the Digital India campaign, have provided a conducive environment for the fintech sector to thrive. Being the youngest country globally, the new generation in India values speed and efficiency, which is often lacking in traditional banking systems. Fintech, offering quick and seamless results through smart devices, aligns well with the preferences of this generation.

The flexibility of India's younger population in embracing change has also contributed to fintech's success. This demographic is quick to adopt new technologies and is not bound by rigid financial traditions. Recognizing the underserved segments of the population by traditional financial services, the fintech industry strategically tapped into this vast and unexplored market. The rapid expansion of the e-commerce industry further fueled the growth of the fintech sector.

Since 2016, the fintech industry in India has been on a steady growth trajectory, but the onset of the COVID-19 pandemic significantly accelerated its pace. The need for touchless transactions during the pandemic intensified the adoption of fintech services, further cementing its position as a key player in the Indian financial landscape.

Conclusion

In conclusion, the startup landscape in India presents a dynamic and compelling narrative in 2023. With a surge in global venture capital reaching $540 billion in 2022 and sustained momentum in 2023, startups have emerged as a transformative force in the global economy. However, navigating the entrepreneurial journey remains challenging, with a 90% failure rate highlighting the resilience required for success. The challenges faced by startups, from regulatory complexity to funding accessibility, intense market competition, infrastructure constraints, talent acquisition, and rapid market dynamics, underscore the need for strategic solutions.

The Global Startup Economic Report 2023 positions India as the 3rd largest ecosystem for startups, showcasing its significant contribution to the global scaleup landscape. The fintech sector, a key player in this narrative, has played a pivotal role in India's startup success story. The evolution of fintech, triggered by the demonetization of 2016, has transformed digital transactions and financial services. The reasons behind the growth of fintech in India include widespread internet and smartphone usage, government initiatives, and the adaptability of the young population.

Despite the challenges, India has seen exponential growth in the number of startups, unicorn emergence, and venture capital investment. The research objectives focused on understanding startup challenges and analyzing the role of fintech in their success. Regulatory reforms, funding accessibility improvements, market differentiation, infrastructure investments, talent strategies, and adaptive approaches to market dynamics are crucial solutions to address startup challenges.

The fintech sector's influence on startup success is evident in its ability to bridge the gap between traditional financial services and the underserved population. Fintech not only enhances financial inclusion but also contributes to the digitization of the financial landscape. As startups continue to thrive, understanding the multifaceted support mechanisms from government, universities, and family becomes essential.

Reviewing existing research, it is evident that innovation, investment, and an entrepreneurial culture are critical factors in startup survival. Fintech adoption emerges as a significant factor, as seen in studies highlighting its positive impact on the performance and default risk of traditional financial institutions. Fintech's role in overcoming challenges and driving financial inclusion emphasizes its importance in the startup ecosystem.

The need and significance of studying startups, particularly with a focus on fintech, become apparent in the changing financial landscape. Fintech's impact on financial services, investment decisions, and regulatory frameworks necessitates a nuanced understanding. This study serves as a compass for investors, policymakers, and stakeholders, guiding them through the transformative currents of the modern entrepreneurial landscape.

In conclusion, startups in India, buoyed by fintech innovation, exemplify the nation's entrepreneurial spirit. As they navigate challenges and contribute to the global startup ecosystem, the symbiotic relationship between startups and fintech unfolds as a key driver of economic growth and technological advancement in India.

References

Anastasia Kusumaningtyas, Edgar Bolo, Istianah, Steward Chua, Mahendra Wiratama and Nyayu Lathifah Tirdasari (2021). "Why Start-ups Fail: Cases, Challenges, and Solutions", Published by Atlantis Press International B.V, http://creativecommons.org/licenses/by-nc/4.0/.

Ankur Bist (2023). "The Importance of Building a Digital Business Startup in College", Startupreneur Bisnis Digital (SABDA), DOI: https://doi.org/10.34306/sabda.v2i1.265.

Christian Haddad, Lars Hornuf (2021). "The Impact of Fintech Startups on Financial Institutions Performance and Default Risk", CESifo Working Papers, ISSN 2364-1428, DOI: https://ssrn.com/abstract=3837778.

Hajer Zarrouk, Teheni El Ghak and Abderazak Bakhouche (2021). "Exploring Economic and Technological Determinants of FinTech Startups' Success and Growth in the United Arab Emirates", *J. Open Innov. Technol. Mark. Complex*. 2021, 7, 50. https://doi.org/10.3390/joitmc7010050.

José Santisteban and David Mauricio (2021). "Critical success factors for technology-based startups", *Int. J. Entrepreneurship and Small Business*, Vol. 42, No. 4, 2021.

Munira Aminova, Edoardo Marchi (2021). "The Role of Innovation on Start-Up Failure vs. Its Success", *International Journal of Business Ethics and Governance (IJBEG)*, ISSN: 2717-9923, DOI: 10.51325/ijbeg.v4i1.60.

Ploypailin Kijkasiwat (2021). "Opportunities and Challenges for Fintech Startups: The Case Study of Thailand", *ABAC Journal* Vol.41 No.2 (April-June 2021, pp: 41-60).

Tom Eisenmann (2021). "Why Start-ups Fail", Harvard Business Review, From the Magazine (May-June 2021).

Web Biography

https://timesofindia.indiatimes.com/news.

https://economictimes.indiatimes.com.

https://www.startupindia.gov.in.

https://startupgenome.com.

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 14-32

Nurturing Entrepreneurship and Startup Culture in Engineering Education

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Abstract

Entrepreneurship is the key factor for nurturing the employment opportunities by its innovation and creativity. As engineering education consists of multidisciplinary with additional skills and engineering education inculcates both business start-up and jobseekers. As the trend in initiating new requirements of the product using it with a viability sustainability of the areas. To make the improvement of entrepreneurs in the future engineers. There should be changes in the curriculum of engineering where the subjects are connected in the form of credits to the students. To share the involvement of the students there should be the passion towards the students from the initial of first year to final years. This is the phase where the engineers are involved from the starting point and know more about the factors of the internal factors and external factors in the society and its impact on political, economical, sociology and legal. In our college we are representing the subjects of entrepreneurship in engineering as we are autonomous colleges. We have included in the first year management subjects and business economies and in third year entrepreneurship and TPR. As we are having an EDC cell most of the students have participated in hackathon, boot camp and idea validation so our college students have been registered for 3 start-ups in our college and are motivating the students to start their business in the initial stages.

Keywords: Entrepreneur Education, Entrepreneurial Mindset, Startup

Introduction

Higher education plays a fundamental role in shaping individuals skills

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and competencies, enabling them to build successful careers in an ever-evolving world. The field of engineering, beyond its role in knowledge dissemination, holds the responsibility of instilling practical skill sets within students. This empowers them to excel in today's complex and rapidly changing landscape. One vital skill that should be cultivated is entrepreneurship. Entrepreneurship refers to the ability of an individual to initiate and oversee the creation of new business or projects.

Young minds often brim with innovative ideas, and integrating an entrepreneurial mindset into education can guide students towards creative thinking, unconventional problem-solving and the establishment of start-ups. The concept of "mass entrepreneurship and innovation", introduced by the central chinese government in 2013, has led to a series of policies that offer favorable conditions for college students to emarck on entrepreneurial ventures.

Consequently, the entrepreneurship rate among Chinese university graduates increased from 2.3% in 2013 to 3% in 2017. While most entrepreneurial endeavors are pursued by graduates in economics, management, and marketing, there is a notable absence of entrepreneurship among engineering graduates. Despite the upward trend in entrepreneurship, the success rate remains low, at just 2.4% for college students in China. Thus, creating a comprehensive entrepreneurship education system for engineering students has become an urgent concern

Universities must equip their students with entrepreneurial abilities to adapt to economic transformations, contribute to entrepreneurial economies, and ensure their own growth. Enhancing the education system in higher institutions is crucial, involving intensified innovation training to nurture entrepreneurial talent [Yang, D., & Zhao, X. (2014)] Across the globe, universities are increasingly incorporating technology entrepreneurship into engineering education, paralleling the expansion of engineering design education. Leading countries like the United States and Japan actively promote entrepreneurship education, alongside support measures that encourage graduates to venture into entrepreneurship. [Cheng, Y. M., Wang, K., & Lee, I. K. (2018)]. Such measures significantly enhance graduates' employability prospects. This paper underscores the significance of infusing Entrepreneurship Education into engineering curricula. Imparting these entrepreneurial skills at an early educational stage is vital, as it equips students to make well-informed decisions in their future endeavors.

Literature

Entrepreneurial skills, a crucial component of life skills, can be cultivated through various means, with educational institutions emerging as a particularly effective avenue. Within this context, educators and faculty members play a vital role in inspiring students to cultivate an enterprising spirit. This equips them to not only embrace novel challenges and identify potential avenues but also nurtures their aptitude for effective management and navigating obstacles within the realm of business. According to this, educators assume a significant responsibility in fostering and equipping students with an entrepreneurial mindset.

This dynamic approach readies individuals to confidently tackle the array of challenges using their newly honed entrepreneurial skills sets. Karimi, Chizari, Biemans, and Mulder [Karimi, S., Chizari, M., Biemans, H. J., & Mulder, M. (2010)] provide a definition of Entrepreneurship as the conduct of an individual who demonstrates the characteristics such as the desire for achievement, need for power, willingness to take risks, and competitiveness are essential for attaining goals and achieving self-sufficiency through exploration and research. This concept of Entrepreneurship encompasses a wide-ranging perspective.

In the perspective of Duane Ireland and Webb (2007), strategic entrepreneurship refers to the concerted efforts of an owner or entrepreneur-director to harness the current competitive strengths of a company while simultaneously exploring innovative avenues that can establish future competitive advantages. This model, as described by Duane Ireland and Webb (2007), represents a distinct framework through which the owner or entrepreneur-director orchestrates the creation of wealth [Hanif, H., Rakhman, A., & Nurkholis, M. (20194 This framework's facets initiate with the interplay of an entrepreneurial mindset and culture, giving rise to entrepreneurial leadership.

This form of leadership then guides strategic resource management and fosters creativity for novel innovations, all aimed at securing a competitive edge that ultimately translates into revenue generation and wealth creation. The realm of technology entrepreneurship is in its early stages when compared to fields like economics, entrepreneurship, and management. Technology entrepreneurship encompasses the organization, management, and assumption of risk within a technology-centered business (Nicholas and Armstrong, 2003).

Other interpretations include crafting a novel technology driven venture (Jones-Evans, 1995) and the strategies entrepreneurs employ to access resources and frameworks for leveraging distinctive technological prospects (Liu et al., 2005) [Nair, S., Sundar, S., & Mangadu Paramasivam, G. (2020)]. A technology-intensive opportunity is one that engages in the process of addressing challenges, enhancing the quality of life, necessitating technical proficiency and applications, pinpointing potential markets, and enhancing product excellence to bolster a firm's competitiveness while anticipating cost savings within operations.

The high risk of failure emerges from the fact that developing new products, particularly in the technological sphere, is inherently precarious. This is due to the potential disparity between a technically feasible innovation and its economic viability, often resulting in products not enduring the challenges of the commercialization process. The progress and regression of a nation are significantly hinged on its accomplishments in entrepreneurship. A higher level of entrepreneurial activity corresponds to an increased job creation, consequently fostering greater economic growth.

Renowned economist Schumpeter asserts that entrepreneurship serves as a pivotal determinant of a nation's technological performance (Michelacci & Silva, 2007).

Minniti and Lévesque (2008) introduce open-ended inquiries regarding entrepreneurship, such as the extent of its contribution to economic growth and whether all forms of entrepreneurial activities effectively bolster economic progress. Throughout history, economists have displayed a keen interest in observing entrepreneurship. Notably, Richard Cantillon, an economist from Ireland, laid the groundwork for such observations by defining entrepreneurship as an individual's inclination to engage in economic practices aimed at garnering profits by capitalizing on price discrepancies across diverse financial markets, involving associated financial risks.

Over time, more economists have delved into the examination of entrepreneurship, often concentrating on entrepreneurial behaviors (Minniti & Lévesque, 2008).[Hanif, H., Rakhman, A., & Nurkholis, M. (2019)]

Eric Ries, a prominent American entrepreneur and prolific author, stands out as one of the most recognizable voices in the startup landscape. With a portfolio of startups, including IMVU, and advisory roles in shaping business and product strategies for venture capital firms, Ries has garnered widespread recognition. In his work, Ries defines startups as captivating business entities that offer room for soaring expectations while also carrying the potential for disappointment. He perceives startups as institutions comprising individuals united by a primary objective: to create groundbreaking products or services under conditions marked by extreme uncertainty.

Few authors emphasize that startups are fundamentally human ventures, emphasizing people over mere products, technology, or innovative concepts. Within the realm of startups, failure can arise from a multitude of factors, often intertwined rather than isolated. A pivotal determinant is the alignment between market demand and product viability [Mikle, L. (2020).]. Even if a market need exists, insufficient or unsustainable demand for the product or service can impede revenue generation, thus obstructing the startup's growth trajectory.

The acquisition of adequate funding is frequently a pivotal juncture for startups. Capital is indispensable for purposes like product development, marketing, and operational expansion. Absence of robust funding mechanisms or effective financial management can precipitate financial crises that stymie growth. Equally crucial is the composition and dynamics of the startup team. A team lacking essential skills, experience, or cohesion can undermine effective decision-making, result in missed opportunities, and give rise to operational complexities. In essence, Eric Ries' insights underscore the intricate interplay of factors that can shape the fate of startups, from the fundamentals of team dynamics to the critical balance between product innovation and market demand.

The process of entrepreneurship is intricately woven into the fabric of social networks, where entrepreneurs are propelled by the pursuit of opportunities rather than a mere desire to allocate resources (Stevenson, 1984). Entrepreneurs remain in a perpetual state of vigilance, driven by the quest for optimal profit attainment. This aspiration hinges on their capacity to seize and leverage the opportunities that come their way.

A vital avenue through which these opportunities are sensed and exploited is via one's social network – an intricate web of connections amongst individuals (Brass, 1992). In this framework, social interactions become interwoven with economic actions of both individuals and firms (Granovetter, 1985). Aldrich and Zimmer (1986) offer an alternative lens through which to view entrepreneurship. They posit that entrepreneurship is enmeshed within networks of ongoing social relations. Within this framework, the dynamics of entrepreneurship are either bolstered or constrained by the interplay of connections binding entrepreneurs, resources, and opportunities.

A paramount advantage of such networks lies in the access they grant to information and advice, indispensable elements in establishing institutions or corporations (Freeman, 1999). Granovetter's perspective further emphasizes the significance of both strong and weak ties within society, which bind various members together (Barabasi, 2003). He introduces the notion of weak ties, illustrating how individuals (A, B, C, D, E...) and their connections create a network. For instance, if A is closely linked to both B and C, a connection naturally exists between B and C, consistently present within the framework (Granovetter, 1983) [Subrahmanyam, S. (2019)]. In essence, the intricacies of entrepreneurship find their roots in social networks, with entrepreneurs navigating opportunities and resources through the delicate interplay of connections, alliances, and the valuable insights exchanged within these networks.

Access to financial services stands as a pivotal factor crucial for the sustained existence of most newly established firms, holding a vital position in the practice of entrepreneurship. Shuo highlights that governments deploy methods such as direct subsidies, tax incentives, and government procurement to infuse substantial resources into the entrepreneurial journey. To drive economic development through entrepreneurship, a consistent funding model must be established to sustain the support programs. The funding should align with the policy blueprint that establishes these assistance initiatives.

Government initiatives also contribute to a Policy Framework, wherein policies are crafted to bolster entrepreneurship. These policies focus on enhancing the ease of conducting business, safeguarding intellectual property, and facilitating investment. This regulatory structure offers a clear path that encourages business initiation and expansion. Additionally, Financial Support mechanisms come into play, with governments extending financial aid to startups and entrepreneurs through channels such as venture capital funds, grants, subsidies, and loans [Obaji, N. O., & Olugu, M. U. (2014)].

Such financial backing surmounts initial capital hurdles and bolsters inventive business concepts. Furthermore, Support for Women Entrepreneurs is emphasized, with governments championing women's entrepreneurship through dedicated schemes, financial incentives, and training initiatives. These endeavors drive both gender equality and economic empowerment. Innovation and Entrepreneurship Development Centres, established in partnership with educational institutions, serve as pivotal platforms. These centers furnish training, mentorship, and resources to aspiring entrepreneurs, nurturing a culture of innovation from a young age. (Binani, S., Singh, T. A., & Shoeb, S. (2023). Freshmen Protégé Perspectives on Mentoring in Engineering Education - A Qualitative Study. Journal of Engineering Education Transformations, 36 (Special Issue 2).

In 1990, NABARD (National Bank for Agriculture and Rural Development) introduced the Rural Entrepreneurship Development Programme (REDP) as a significant promotional endeavor aimed at fostering enterprise and generating employment in the rural non-farm sector (RNFS). The core objectives of REDP encompass nurturing entrepreneurship skills and activity-oriented competencies among educated unemployed rural youth. NABARD disburses grant assistance for implementing the program in seven installments, contingent upon the submission of Monitoring Reports.

A proportional deduction in grant assistance is made in instances of trainee dropouts. The assurance of the Lead District Manager (LDM) is sought to facilitate bank credit for the trained entrepreneurs. Additionally, provisions dictate that agencies must return any remaining grant funds that were either surplus or unutilized for the program. Trainees within the age bracket of 18 to 35 years are eligible to participate. NABARD's initiative, the SHG-Bank Linkage Programme, commenced as an Action Research Project in 1989. It gained momentum with the launch of a Pilot Project in February 1992, connecting 500 Self-Help Groups (SHGs) with banking systems nationwide.

NABARD (National Bank for Agricultural and Rural Development) facilitates refinancing for banks that lend to SHGs. The movement has since grown, with 2.24 million SHGs linked to 44,362 bank branches of 545 banks in 583 districts across 31 states in India. The cumulative disbursement of funds total Rs. 113.98 billion by March 31, 2006 (NABARD, 2006). Notably, during 2004-05, around 0.54 million new SHGs were extended bank loans, resulting in the disbursal of Rs. 2.99 billion in bank loans during that period (NABARD). In India, Southern regions, particularly Andhra Pradesh, Tamil Nadu, and Karnataka, house 58 per cent of the total SHGs as of March 2005.

A Self-Help Group (SHG) is an organization rooted in the community, usually comprising a small cohort of individuals who share similar socio-economic circumstances. These individuals collaborate to collectively tackle shared financial, social, and entrepreneurial requirements. SHGs are especially geared toward empowering their members, often focusing on women, by fostering unity, facilitating learning and skill enhancement, and promoting financial inclusivity.

SHGs Play a Vital Role in Advancing Entrepreneurship:

- Skill Enhancement: SHGs facilitate skill development among their members.
- Financial Access: They provide avenues for accessing financial resources.
- Microenterprise Progression: SHGs contribute to the growth of microenterprises.
- Linking to Markets: They establish connections to broader markets.
- Capacity Reinforcement: SHGs focus on building capabilities.
- Empowerment of Women: SHGs promote the empowerment of women.
- Risk Management: They assist in mitigating risks and challenges.

The role of women in entrepreneurship has gained acknowledgment as a noteworthy catalyst for economic advancement. Female entrepreneurs not only generate fresh employment opportunities for themselves and others, but also contribute a diverse range of approaches to addressing managerial, organizational, and business challenges within society. Nevertheless, women entrepreneurs continue to constitute a minority among the entrepreneur community. Often, they encounter gender-related obstacles that impede the inception and expansion of their businesses.

Such challenges include discriminatory property laws, constraints imposed by marital status and inheritance norms, cultural practices, restricted access to formal financial resources, limited mobility, and obstacles in obtaining information and establishing networks.

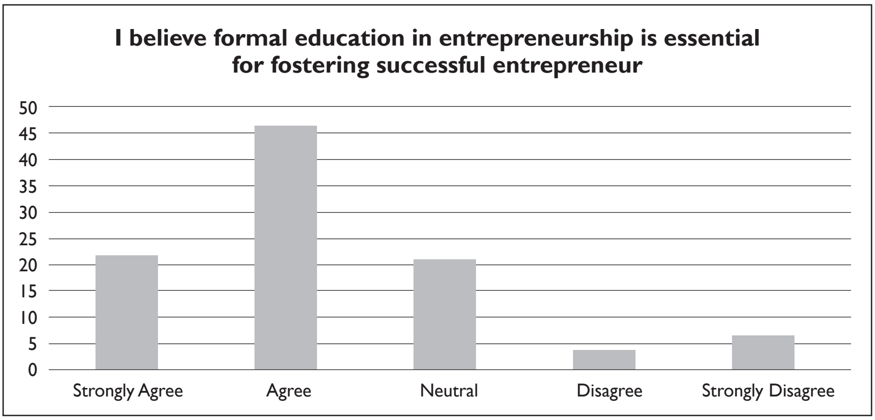
Methodology

For the purpose of this study, a questionnaire was created to gather data. The data was collected from the Entrepreneurs and emerging startups from the engineering institute. After gathering the information, the responses were evaluated to determine the importance of entrepreneurial education in engineering education. The data was analyzed qualitatively.

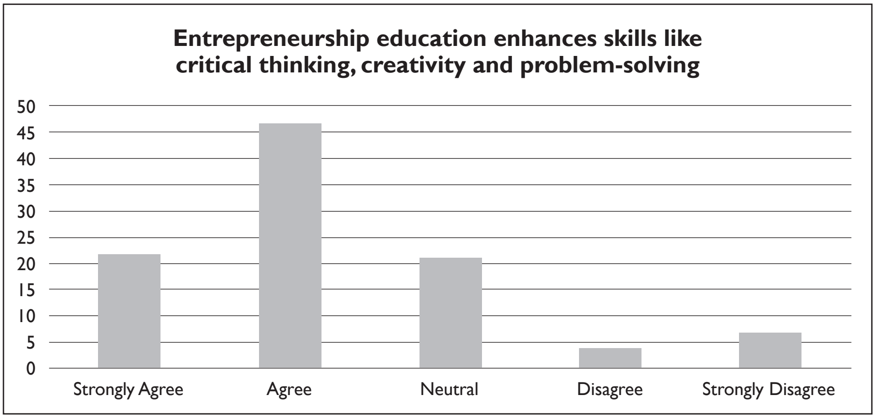
(Binani, S. (2022). Overall, 200 responses were gathered. The survey tool was created in Google Forms and distributed during an entrepreneurship session conducted in the institute. Out of which 133 interest entrepreneurs responded to answer the survey's questions in fewer than 48 hours, and after 24 hours, a reminder was given.

Results and Analysis

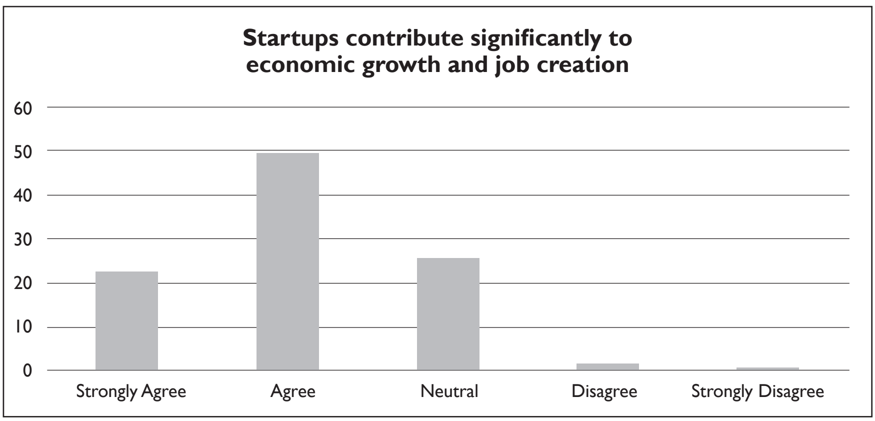
Impact of Startups in Engineering Education: Success and Failure



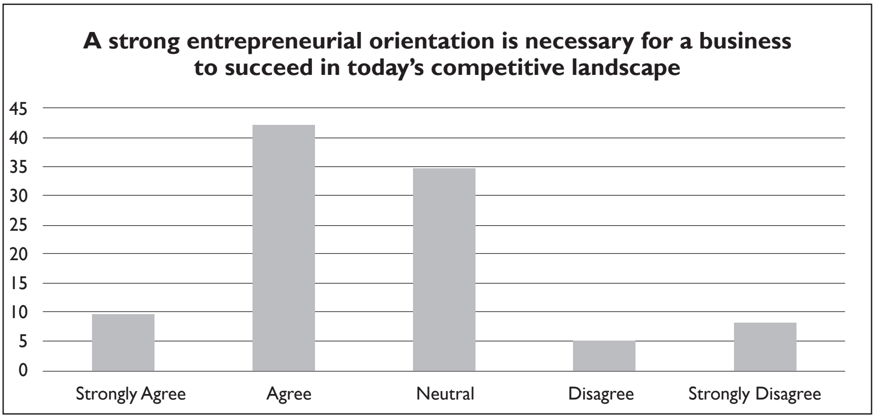
It's evident from the bar graph that a significant portion, around 49%, of students believe that entrepreneurial education holds high importance for engineering studies. They are likely to perceive such education as crucial for their future endeavors. Another group of students, comprising a majority but less than those who strongly agree, view entrepreneurial education as moderately important. In contrast, only a small minority, approximately 7.9%, of students appear to disagree with the incorporation of entrepreneurial courses within engineering curricula. This suggests that a relatively small number of students hold a negative stance towards these courses.



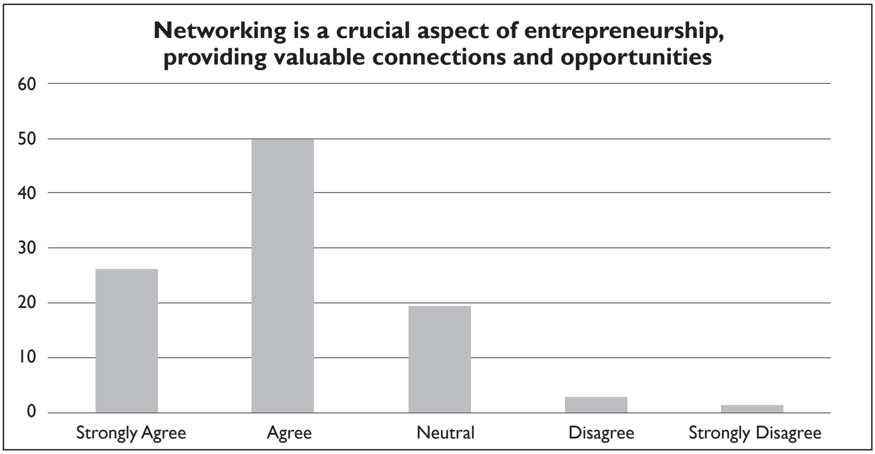
Analyzing the provided bar graph, it becomes evident that the majority of engineering students, around 49.6%, acknowledge that entrepreneurship education plays a substantial role in enhancing critical thinking, creativity, and problem-solving skills. This indicates that they believe such education contributes positively to fostering innovative thinking among individuals. Within this group, a significant subset, approximately 21.8%, strongly agrees with the statement, signifying a particularly strong belief in the benefits of entrepreneurship education for nurturing these skills. Another notable fraction, approximately 21.1%, shares the view that entrepreneurship education holds equal importance in developing these skills. Conversely, a relatively small minority of student's express disagreement with this notion. However, the specific percentage of students who disagree is not provided in the information.



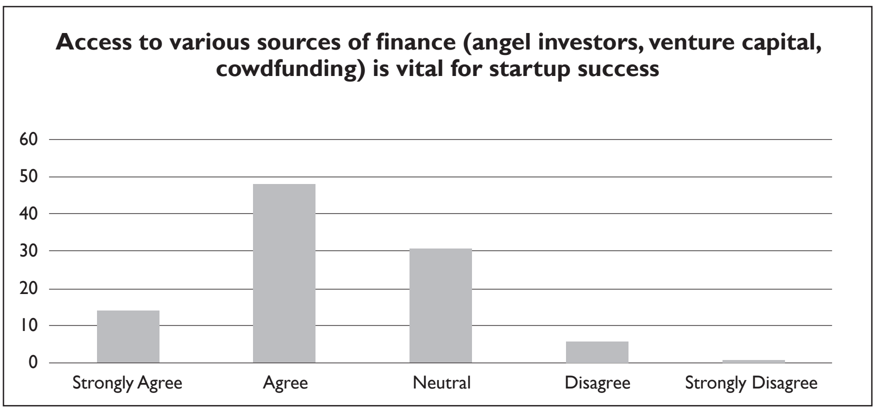
The data depicted in the bar graph is indicative of the perspective that a considerable proportion, approximately 49.6%, of the surveyed individuals hold regarding startups. They believe that startups play a significant role in driving both economic growth and job creation. This suggests that these respondents consider startups to be influential in positively impacting the economy by generating employment opportunities and contributing to overall growth. Additionally, within this segment of respondents, a distinct subset of around 22.6% expresses strong agreement with the notion that the emergence of new startups directly leads to a heightened level of job creation. This subgroup holds a particularly firm conviction that startups substantially contribute to the creation of employment opportunities. On the other side, a relatively smaller segment of respondents, accounting for roughly 25.6%, adopt a more neutral stance. This suggests that they may not strongly associate startups with either significant economic growth or pronounced job creation.



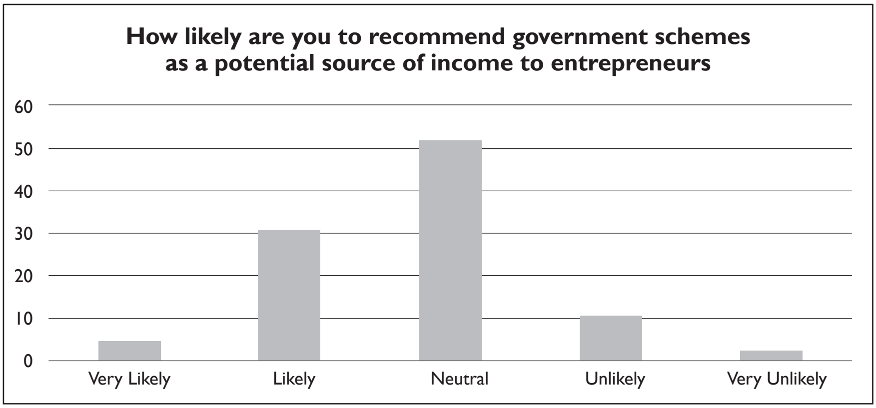
The survey data provides insights into the viewpoint that a robust entrepreneurial orientation is a vital factor for a business to thrive within the contemporary competitive environment. According to the survey results, approximately 42.1% of the students are in agreement with this assertion. This suggests that a significant portion of respondents believe that a strong entrepreneurial orientation is indeed crucial for business success in today's competitive landscape. Around 34.6% of students express neutral sentiments towards this statement. This implies that these respondents may not strongly lean towards agreeing or disagreeing with the idea that entrepreneurial orientation is a decisive factor in business success. Eventually on the other hand a smaller portion of students, roughly 8.3%, strongly disagree with the notion that a strong entrepreneurial orientation is necessary for business success. These individuals hold a clear stance that entrepreneurship might not play a significant role in determining the success of a business in the competitive landscape.



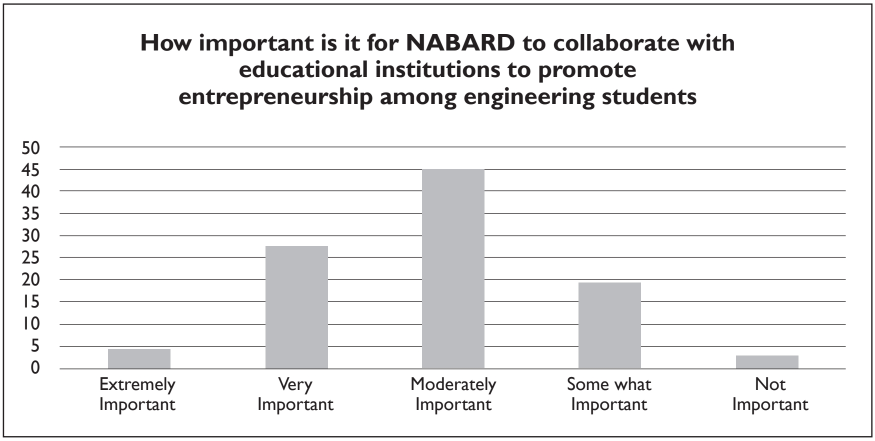
As per the statement regarding the significance of networking as a vital aspect of entrepreneurship, facilitating valuable connections and opportunities, yielded the following results in the survey. Approximately 49.6% of the students agreed with the statement, implying that they recognize networking's role in providing value through connections and opportunities. Around 19.5% of the students held a neutral stance, suggesting that they neither strongly agreed nor disagreed with the statement. About 26.3% of the students strongly agreed with the statement, indicating a firm belief in the importance of networking for entrepreneurship and the benefits it brings in terms of connections and opportunities. A minority of students showed disagreement with the statement, but the specific percentage of those who disagreed or strongly disagreed is not provided in the information.



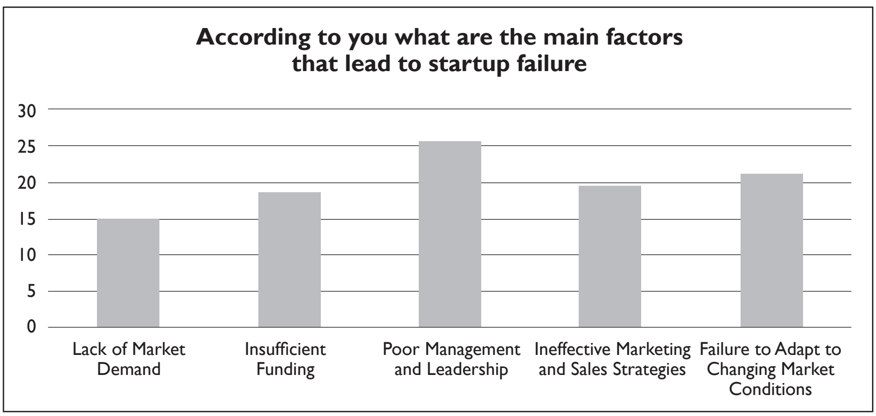
Based on the provided data, it can be inferred that students' opinions on the importance of access to different financial resources for the success of startups are as follows, Approximately 48.1% of the students believe that access to various financial resources such as angel investors, venture capital, and crowdfunding is highly important for the success of startups. This suggests that these students recognize the crucial role that different funding avenues play in achieving startup success. Around 30.8% of the students hold a neutral viewpoint, indicating that they consider access to these financial resources to be of normal or equal importance. This group neither strongly agrees or disagrees with the statement. A minority, about 6% of the students, disagree with the statement. This indicates that they do not consider access to these financial resources to be particularly important for startup success. A smaller subset of students, roughly 14.3%, strongly agree with the statement. They hold a firm belief that starting a new business requires investments, and the involvement of investors like angel investors is crucial.



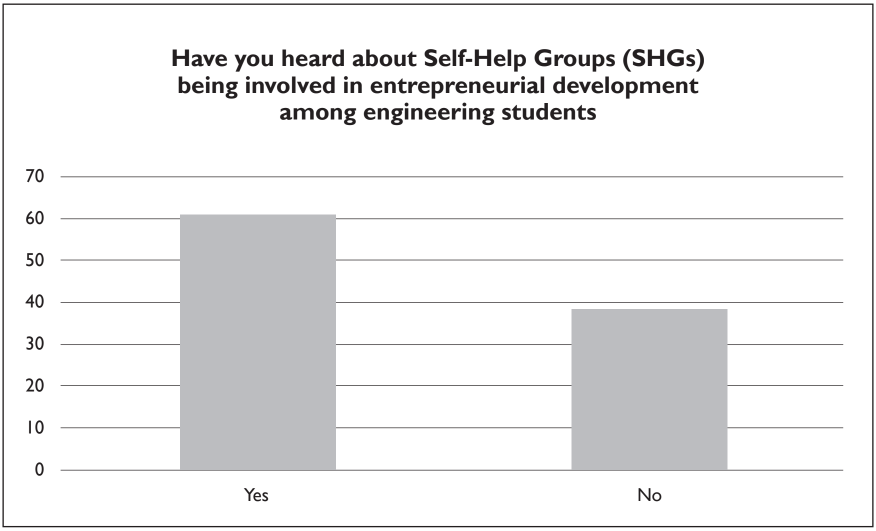
Based on the survey results related to the likelihood of recommending government schemes as a potential source of income for entrepreneurship, the data can be summarized as follows, Approximately 51.9% of the respondents held a neutral stance. This suggests that they neither strongly supported nor opposed the idea of recommending government schemes as a source of income for entrepreneurship. Around 8% of the respondents were likely to agree with recommending government schemes as a potential income source for entrepreneurship. This indicates that a small portion of the surveyed individuals saw government schemes as beneficial for entrepreneurs. About 10.5% of the respondents were unlikely to recommend government schemes as a source of income for entrepreneurship. This suggests that they did not view government schemes as a favorable option for entrepreneurs to generate income.



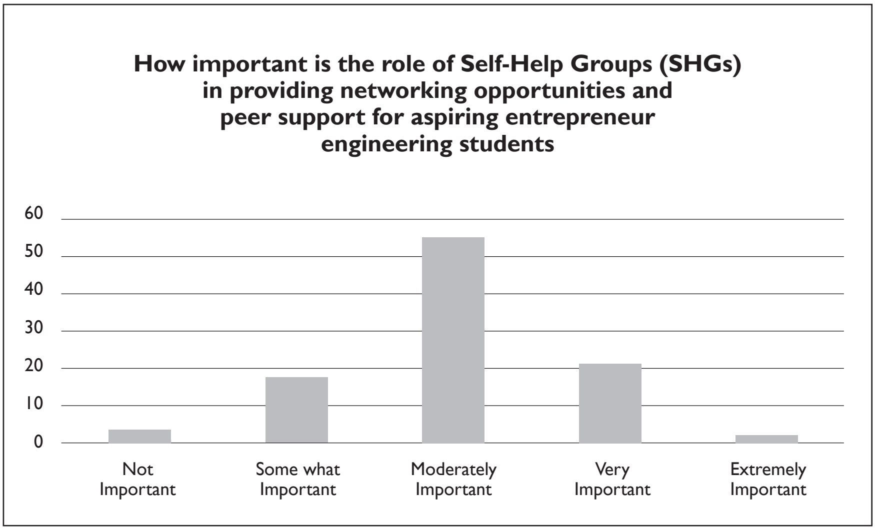
The survey results, which gauge the perceived importance of NABARD (National Bank for Agriculture and Rural Development) collaborating with educational institutes to promote entrepreneurship among engineering students was like Approximately 45.1% of the surveyed students expressed a moderate level of importance regarding NABARD's collaboration with educational institutes for promoting entrepreneurship among engineering students. This suggests that a significant portion of the respondents view such collaboration as having a reasonably important impact. About 27.8% of the surveyed students considered this collaboration to be very important. This group of respondents attaches a higher level of importance to the collaboration between NABARD and educational institutes in fostering entrepreneurship among engineering students. Around 19.5% of the surveyed students expressed that the collaboration was somewhat important. This implies that this subgroup views the collaboration as having some level of importance, albeit not as significant as the previous groups. There was a minority of students who believed that collaboration was extremely important.



About 25.6% of the respondents identified "poor management and leadership skills" as a significant factor leading to startup failure. This suggests that a considerable portion of the participants believe that ineffective management and leadership contribute to the downfall of startups. Around 19.5% of the respondents pointed to "ineffective marketing and sales strategies" as a key factor behind startup failure. This indicates that a notable segment of respondents perceives the lack of effective marketing and sales efforts as detrimental to startup success. Approximately 21.1% of the respondents highlighted "failure to adapt to changing market conditions" as a crucial factor in startup failure. This suggests that this group believes that startups that do not adjust to market changes are more likely to face failure. Roughly 15% of the respondents attributed startup failure to "lack of market demand." This subset of participants believes that insufficient demand for the product or service plays a significant role in causing startups to fail. About 18.8% of the respondents associated startup failure with "insufficient funding." This implies that this group sees inadequate funding as a substantial reason for startup failures.



Based on the presented information, it's apparent that a majority of the respondents, approximately 60.9%, are aware of self-help groups (SHGs) being involved in entrepreneur development among engineering students. This suggests that a significant proportion of the surveyed individuals have some level of familiarity with the concept of SHGs contributing to fostering entrepreneurship among engineering students. Conversely, about 39.1% of the respondents indicated that they have not heard about self-help groups being involved in entrepreneur development among engineering students. Given the outcome of the survey, it appears that there is a prevailing sentiment that more knowledge should be provided to students regarding schemes like NABARD and self-help groups (SSGs). This education aims to enlighten students about the potential benefits of initiating their own entrepreneurial ventures and innovating business ideas. This attitude reflects a desire to move beyond traditional job dependence and consider entrepreneurship as a valuable avenue for personal.



Based on the provided information, the perceptions of the surveyed individuals regarding the potential impact of self help groups on fostering entrepreneur development among engineering students can be summarized as follows:

This indicates that they did not strongly lean towards believing that self-help groups have a significant impact on fostering entrepreneur development among engineering students. Around 6% of the students perceived the impact of self-help groups as very low. This group believed that self-help groups had a minimal effect on promoting entrepreneur development among engineering students. A very small percentage of respondents indicated a view of very high impact, although the specific percentage is not mentioned. These individuals believed that self-help groups had an exceptionally strong positive influence on fostering entrepreneur development among engineering students. About 23.3% of the students believed that self-help groups had a high impact on fostering entrepreneur development among engineering students. This group held the opinion that self-help groups play a substantial role in promoting entrepreneurial growth.

Conclusions

The research conducted by our team underscores the complexity of nurturing entrepreneurship, highlighting that it's a multifaceted endeavor that demands a nuanced understanding of various factors. These factors include personal traits like extraversion and introversion, and how they relate to opportunities. Additionally, traits like agreeableness and neuroticism play a role in shaping entrepreneurial behavior. Importantly, the research suggests that embracing failure as a learning experience is a key aspect of fostering entrepreneurship.

Learning in real-time, by comparing developmental progress with project growth, aids in adapting and refining strategies accordingly. This approach is fundamental to the orientation and awareness of entrepreneurship. Practical implementation and a comprehensive understanding of the market through SWOT analysis are vital in this context. This involves understanding the preferences of the target customers, thereby improving the chances of success. Learning from both successes and failures, and sharing these stories, contributes to a well-rounded entrepreneurial education.

The significance of face-to-face interactions is emphasized, allowing individuals to witness the tangible growth of successful ventures and interact with experienced entrepreneurs. This serves as a bridge between theory and practice. In the current landscape, a PESTL analysis – Political, Economic, Social, Technological, and Legal – provides insight into the unique environment for entrepreneurship. This includes political stability, economic conditions, social norms, technological advancements, and legal regulations. It's noted that the combination of these factors in your country sets it apart from others, presenting specific challenges and opportunities.

The research suggests a structured approach to nurturing entrepreneurship: Prospective entrepreneurs need to be aware of the entrepreneurial landscape, understand their goals, and align them with the unique circumstances of their environment, providing education and training equips individuals with the necessary skills to navigate challenges and mitigate risks associated with entrepreneurship. Encouraging individuals to act on their ideas, facilitated by mentorship and access to resources, is a critical step. Developing strong leadership skills is essential for managing teams and projects effectively

From An overall point of view, nurturing entrepreneurship involves understanding the interplay of personal traits, learning from failures, and adapting strategies based on real time progress. Practical implementation, market research, success and failure stories, and face-to-face interactions all contribute to a holistic entrepreneurial education. Considering the unique PESTL factors of your country further refines the approach. This holistic framework serves as a guide to cultivating successful entrepreneurs, taking into account both the challenges and opportunities that are distinctive to your region.

Recommendation

As per the survey, the data interpretation provides several key points related to a startup, particularly one led by women entrepreneurs. It emphasizes the influence of women entrepreneurs who completed degree qualifications and inspired the author to become an entrepreneur with the goal of generating employment and personal satisfaction.

The desire for freedom, passion, and the pursuit of making decisions are mentioned as driving forces. The data also suggests that some individuals observed positive changes after implementing certain measures, and the startup seems to be involved in online transactions, specifically related to offering affordable, low-calorie food products. In the early stages, there's an emphasis on creating widely accepted products, and it's noted that public awareness of government schemes is limited. Support from various sources, including SISFS.

A key challenge highlighted is the limited funding received by women-led startups. Technical issues are also attributed to a lack of knowledge during the startup's inception, including marketing strategies such as word-of-mouth, references, and digital marketing via social media. Engineering is noted as a field where early access to business ideas is crucial, and proper documentation and agency support are emphasized.

The data also touches on the fact that while many students conceive innovative ideas during their studies, a significant number fail to progress beyond the orientation stage due to various reasons. To address this, government agencies and centers are said to conduct programs to raise awareness among students. The data outlines five distinct stages of startup development.

References

Aysha Adhina, M. (2020). Agri startups: status and prospects in India. Da Silva, G. B., Costa, H. G., & De Barros, M. D. (2015). Entrepreneurship in engineering education: A literature review. *International Journal of Engineering Education*, 31(6), 1701-1710.

Binani, S. (2022). Freshmen Engineering Students' Perspectives on Engineering Ethics – A Qualitative Study. *Journal of Engineering Education Transformations*, 35(Special Issue 1).

Binani, S. (2022). Development of Survey Instrument to Assess Freshmen Engineering Students Understanding on Engineering Ethics. *Journal of Engineering Education Transformations*, 35(Special Issue 1).

Chauhan, A., & Bhatia, K. Women-Empowerment through Women Entrepreneurship (A Study of Hyderabad Zone of Telangana).

Cheng, Y. M., Wang, K., & Lee, I. K. (2018). Application of engineering education in entrepreneurship construction system. EURASIA *Journal of Mathematics, Science and Technology Education*, 14(6), 2185-2191.

Habeebuddin, M., & Sakriya, D. (2017). Start-ups in India – Issues and Challenges. *Emperor International Journal of Finance and Management Research*, Mayas Publication, 317-322.

Hanif, H., Rakhman, A., & Nurkholis, M. (2019). The Construction of Entrepreneurial Accounting: Evidence from Indonesia. Reference to this paper should be made as follows: Hanif, H, 104-117.

Hanif, H., Rakhman, A., & Nurkholis, M. (2019). The Construction of Entrepreneurial Accounting: Evidence from Indonesia. Reference to this paper should be made as follows: Hanif, H, 104-117.

Karimi, S., Chizari, M., Biemans, H. J., & Mulder, M. (2010). Entrepreneurship education in Iranian higher education: The current state and challenges. *European Journal of Scientific Research*, 48(1), 35-50.

Kumar, P. (2015). A study on women entrepreneurs in India. *International Journal of Applied Science & Technology Research Excellence*, 5(5), 43-46.

Kundu, S., & Singh, A. (2023). COVID-19, Women Entrepreneurs and the Untold Stories So Far. In Business: Resilience and Sustainability: Evidence from Emerging Market Developing Economies (pp: 107-120).

Langworthy, M. (2023). Towards an institutional aesthetic of women's entrepreneurs hip: A political economy perspective. *Arab Economic and Business Journal*, 15(2).

Manikandan, A., & Muthumeenakshi, M. (2018). Role of engineering education in sustaining the economic development of India. *International Journal of Mechanical Engineering and Technology*, 9(3), 706-710.

Mansuri, B. B. (2010). Micro financing through self help groups – a case study of bank linkage programme of NABARD. APJ RBM, Sri Krishna International Research & Educational Consortium, 1(3), 141-150.

Mikle, L. (2020). Startups and reasons for their failure. In SHS Web of Conferences (Vol. 83, p. 01046). EDP Sciences.

Misha, V. (2022). Indian Startup Ecosystem – Challenges and Opportunities. *International Journal of Research in Science*, Commerce, Arts, Management and Technology, 7-11.

Nair, S., Sundar, S., & Mangadu Paramasivam, G. (2020). Role of entrepreneurial education in nurturing entrepreneurial orientation among engineering students. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(2), 139-149.

Obaji, N. O., & Olugu, M. U. (2014). The role of government policy in entrepreneurship development. *Science Journal of Business and Management*, 2(4), 109-115.

Pandey, N. K. (2018). An analysis of startup ecosystem in metropolitan city in India. *International Journal of Engineering and Management Research (IJEMR)*, 8(2), 237-244.

Pandey, T. (2017). Challenges and Opportunities of Startup India. *International Journal of Scientific and Innovative Research*, 5(1), 120-125.

Paramasivan, C., & Muthusamy, S. (2016). Emerging trends in new start-up technopreneurs. *Journal of Business Management*, 2(7).

Raghuramapatruni, R., & Kosuri, M. S. R. Enriching DWCRA for Enhancing Social Entrepreneurship.

Raju, G. S., Kumar, N. S., & Ramgopal, N. C. (2015). Entrepreneurship and innovation: A study on factors affecting engineering graduates towards entrepreneurship and innovation. *Journal of Engineering Education Transformations*, 28 (Special Issue).

Ramesh, M., & Patrick, A. Rural Non-Farm Schemes of NABARD – A Study of Rural Entrepreneurship Development Programme.

Sammaiah, M. (2022). Role of Self-Help Groups in Socio-Economic Development of Women in Telangana

Subrahmanyam, S. (2019). Social networking for entrepreneurship. *International Journal of Commerce and Management Research*, 5(1), 117-122.

Sunitha, S. A Study of The Issues and Its Implications for Women Entrepreneurs in Telangana After COVID-19.

Yang, D., & Zhao, X. (2014). Study on evolutionary path of university students' entrepreneurship training. Mathematical Problems in Engineering, 2014.

https://www.serp.telangana.gov.in/SHGTG/

https://msme.gov.in/sites/default/files/MSME_Schemes_English_0.pd

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 33-50

The Influence of UI-UX, Ease of Payments and Emotional Stimuli on Online Consumer Impulsive Purchases

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Abstract

Online impulsive purchases occur when customers make spontaneous purchasing decisions that are driven by emotions, sights, or limited-time offers. The ease of e-commerce, along with tempting product displays and one-click checkout, encourages this behaviour. The pre-existing researches confirmed the significant role of factors such as motivation: internal and external motivation, marketing stimuli: advertisements, discounts, scarcity novelty. But over a few years the buying pattern of Indians have seen a change, with a rise in disposable income there has been a change in the buying habits and decision influencing pattern. This research paper delves into the exploration of novel elements such as user interface (UI) and user experience (UX) in shopping apps, browsing duration, and the convenience of payment methods like UPI and pay later features, elucidating their substantial impact on impulsive purchasing behavior. Through the gathered data, a comprehensive analysis was performed, revealing that these emerging factors play a crucial role in influencing impulsive purchase decisions among potential customers. The examination identified four primary factors as particularly noteworthy: UPI, motivation, UI-UX, and EMI-based payments.

Furthermore, the research paper provides valuable insights into the correlation between disposable income and the frequency of impulsive online purchases, revealing a significant connection. Consequently, the study comprehensively explores and analyzes the transformative changes in the dynamics of purchase decisions influenced by these new factors.

Keywords: Emotional Stimuli, Impulse Purchase, Online Consumer Behavior, User Experience, User Interface

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Introduction

The acceptability of online shopping among consumers has witnessed a significant surge, paralleling the substantial growth of e-commerce in the past decade. Initially apprehensive about engaging in transactions through online channels, consumers now enjoy enhanced benefits due to intense competition among stores. This includes not only competitive pricing and product quality but also a heightened focus on the quality of after-sales services. Online purchasing has evolved into a more accessible and straightforward method for consumers, who appreciate the conveniences and advantages offered by e-commerce. Over time, consumers have developed distinct purchasing patterns on commercial websites and mobile apps.

Post the COVID-19 pandemic, India experienced a remarkable 25% surge in online purchases during FY21, despite a two-month national lockdown that disrupted the economy (Vinaykumar, 2021). This spike, predominantly observed in electronic devices, allowed Indian shoppers to place greater reliance on online platforms, contributing to increased sales. McKinsey & Co. reports a notable increase in impulsive buying behavior in the Asian region, particularly among Gen Z (McKinsey, 2022). Studies suggest that over 60% of in-store purchases are impulsive, and the online environment further amplifies this tendency among customers. Consequently, various marketing stimuli, such as product displays, communication strategies, store atmospheres, and pricing features, are strategically employed to induce impulsive purchasing behavior (Mohan, 2013; Tyrväinen, 2020).

In the realm of online shopping, purchasing decisions often hinge on hedonic shopping value, especially in the form of enticing offers like flash sales on e-commerce platforms that create a sense of urgency to buy before products run out of stock. This urgency makes individuals more inclined to make a purchase, fearing they might miss out on a favorable deal. The appeal to potential buyers extends beyond hedonic or marketing stimuli, with user interface (UI) and user experience (UX) also playing a crucial role. Given that India predominantly leans towards smartphone usage over PCs or laptops, customers are more inclined to make online purchases through mobile-friendly apps or websites, emphasizing the significance of a positive user experience and convenient user interface for a satisfying shopping experience.

Furthermore, India has witnessed improvements in payment facilities over the years, with the rise of UPI and increased customer understanding of the benefits of credit cards and app wallets over cash. These factors contribute significantly to impulsive purchases.

In the context of the S-O-R (Stimulus-Organism-Response) framework, this research paper seeks to examine the motivating factors influencing impulsive purchase behavior. Building on existing research on impulsive buying behavior, the study identifies the S-O-R framework as fitting well. Several broad factors, including motivation, ease of payment, market stimuli, user interface, and user experience, are highlighted for testing their effects on stimulating impulsive buying behavior.

Goal of the Research: The primary objective of this research paper is to identify and understand the significance of factors influencing impulsive buying behavior in the context of online platforms. Additionally, it aims to provide insights into the specific elements and underlying details within these broadly categorized factors, offering a perspective on their impact in the Indian market.

Research Gap: As impulsive online purchases continue to rise, the research aims to address the existing gap in understanding major influencing factors. It specifically investigates whether factors like UI-UX and easy payment facilities contribute to impulsive online purchases. While previous studies have mainly focused on marketing stimuli or hedonic motivation, this research explores the role of improved payment methods and evolving interfaces, along with the impact of enhanced buying experiences through better interface design and commercially viable artificial intelligence interventions.

Theoretical Framework of the Study: This research adopts the Stimulus-Organism-Response (S-O-R) framework, as it analyzes the factors influencing customers to respond to stimuli by making impulsive purchases online. The S-O-R model incorporates impulsive behavior and expenditures resulting from online impulsive purchases. Within the model, variables such as shopping enjoyment facilitated by improved UI/UX, time spent in browsing, and impulsivity act as mediators. The study builds upon existing research in the realm of impulsive purchasing by considering the characteristics of e-store stimuli deemed relevant. It expands this knowledge by establishing the economic consequences of impulsive online purchases, a dimension deemed crucial in understanding consumer behavior.

Literature Review

The secondary data utilized for identifying overarching factors contributing to impulsive purchases is drawn from research papers published in reputable journals, specifically focusing on the Asia Pacific region and Saudi Arabia. The literature review explores online impulsive buying, its various types, and elucidates on the key contributing factors such as marketing stimuli, UI & UX, Motivation and Ease of Banking, and Browsing time, derived from insights gathered in these research papers.

1. Online Impulsive Buying: As per (Rook, D. W., 1987), impulsive buying is characterized by “a sudden, often powerful and persistent urge to

buy something immediately.” However, this definition, crafted by (Rook, D. W., 1987), was initially centered around impulses triggered by tactile stimuli (Louis Yi-Shih Lo, 2016). Over time, the definition evolved to describe impulsive buying as “a sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task” (Beatty, 1998). In simpler terms, impulse buying refers to the unplanned acquisition of products, services, or experiences. Stern (1962) further categorizes it into four types: pure impulse buying (PIB), reminder impulse buying (RIB), suggestion impulse buying (SIB), and planned impulse buying (PlIB) (Louis Yi-Shih Lo, 2016).

Types of Impulse Buying, and their Occurrences (Zhang, 2018)

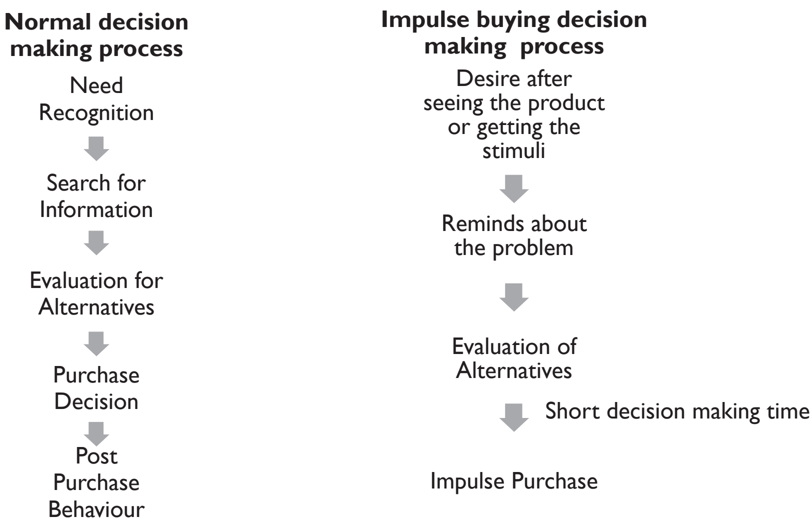
Acronym	Full Form	Occurrence
PIB	Pure Impulse Buying	Occurs when customer is lured by a novelty.
RIB	Reminder Impulse Buying	Happens when customer recollects through ads or looking at the product and remember that their stock is about to diminish or is low and requires a refill.
SIB	Suggestion Impulse Buying	Happens when a buyer sees a product and depicts a need for it even though the customer is unfamiliar with the product.
PlIB	Planned Impulse Buying	Occurs when the customer has a certain goal in their mind yet they get diverted by the sales or discounts offered and triggers them to buy the products.

(Baumeister, 2002): In 2002, Baumeister’s research paper posited that self-control is comprised of three components: Objectives, monitoring process, and Operational capacity. The failure of any of these factors results in the failure of self-control. Tasks requiring self-control deplete an individual’s resources, impacting the available power of self-control for subsequent activities. This phenomenon, termed ego depletion, heightens the likelihood of accepting others’ opinions and may drive individuals to be guided by instinct, intuitively opting for the most appealing alternative among various options (Pocheptsova, 2009).

(Choudhary, 2014): In 2014, Chaudhary emphasized the significant role of emotions in impulsive purchases. Recognizing the vulnerability of emotions, marketers strategically address consumers’ emotional needs. Purchasing is viewed as a means for individuals to overcome insecurity and attain a sense of fulfillment. According to (Hyo-Jung Chang, 2011), customers with positive emotional reactions were more prone to spontaneous purchases in a retail setting. The consumer’s mood undeniably influences their purchasing decisions, with excitement and enjoyment notably enhancing impulsive buying and subsequently boosting e-commerce revenue.

Decision-making Process and Impulse Buying Decision-Making: The typical decision-making process involves analytical thinking based on individual buying habits, where customers are calculated and conscious of the intended purchase. This differs from the impulsive purchase pattern, which occurs spontaneously due to induced stimuli. Impulse purchases are made quickly, with buyers often not evaluating the necessity of the product. In contrast, regular purchase patterns take time and are typically pre-determined, with customers being aware of the product they intend to buy. This distinction in buying patterns is illustrated in Figure-2.1.1 as outlined by (Dr. C. Swarnalatha, 2018).

Normal Decision-making Process and Impulse Buying Decision Making Process, referring to (Dr. C. Swarnalatha, 2018)



User Interface & User Experience

User Interface (UI)

UI refers to the interaction between a system and a user, involving prompts or procedures to control the system, input data, and utilize content (heon-sik., 2015). Navigation is crucial for a seamless experience, involving the interconnection of interface elements in the right order to achieve a specific task (Moe, W. W., 2003) (Yang Zhao, 2021). Aesthetics, including standout titles and appropriate font styles, colors, and sizes, play a vital role in conveying information effectively. Simplifying interfaces reduces user frustration and facilitates a smoother experience (Wonjin Jung, 2018).

User Experience (UX)

UX encompasses the entire experience a user has with a system, product, material, or service, influencing feelings, thoughts, and behaviors (Si-Jung Kim, 2016). AI-backed shopping experiences, especially in the Indian e-commerce sector, contribute to the growth of online shopping. Virtual try-ons, using technologies like 3D visualization, enhance user satisfaction and reduce product returns (Wang, 2014; Johnson). Virtual try-ons have been successful in India, with millions of customers trying virtual makeup on platforms like Nykaa, Caratlane, Lenskart, and Lakme (Gaurav Anand, 2022).

H1: There is a significant relationship between user interface design and online impulsive buying.

H2: There is a significant relationship between good user experience and online impulsive buying.

Marketing Stimuli

Promotion & Advertisements

Promotions, offering discounts or incentives, make it easier for consumers to make a purchase, even if it's not immediately necessary. Sales promotions and advertisements influence impulsive buying (Yang Zhao, 2021) (Nyoman Sri Handayani, 2020).

Advertisements have a favorable impact on consumer purchasing behavior, attracting attention and leading to spontaneous purchases (Malik, 2013; Niazi, 2012).

Novelty: Novelty triggers the desire for new products or experiences, contributing to impulsive purchasing decisions online (Yu & Bastin, 2010; Zou, 2018) (Yang Zhao, 2021).

Scarcity: Scarcity, created through limited availability, induces a fear of missing out, encouraging impulsive buying (S. Kemp, F. Bolle, 1999).

Discounts: Discounts and competitive pricing play a significant role in influencing online buying decisions in India, with 81% of buyers spending time searching for the best offers (Mind, 2022).

H3: There is a significant relationship between marketing stimuli and online impulsive buying.

Motivation

Internal Motivators: Internal motivators, such as self-discrepancy, hedonic needs, and social status, trigger impulsive buying based on internal mental processes (Supriya M. Kalla, 2011).

External Motivators: External motivators include shopping setup, visual stimulus, social factors, discounts, perceived trends, and authority to purchase (Supriya M. Kalla, 2011).

H4: There is a significant relationship between customer motivation and online impulsive buying.

Ease of Payment

Digital wallets and easy payment methods, such as UPI, have seen increased adoption in India, contributing to the growth of e-commerce (Nyoman Sri Handayani, 2020; Rengan, 2022). The availability of EMI options and rewards through digital wallets has made payment systems more user-friendly and encouraged online shopping.

H5: There is a significant relationship between ease of payment and online impulsive buying.

Browsing Time: Browsing time, exploring product information, contributes to impulsive buying as customers gain more information at their convenience (Madhavaram, 2004; Park, 2012). Customers often trust online reviews more than marketer-generated content, and browsing helps in finding such reviews (Bickart, 2001).

H6: More time invested in browsing leads to impulsive purchase, hence it has a significant relation.

S-O-R Model: The S-O-R model, based on environmental psychology, posits that stimuli (UI/UX, marketing tactics, ease of payment) influence internal affective evaluations in users, resulting in either approach or avoidance behaviors (Floh, 2013). Emotional states act as mediators in completing the S-O-R model's sequence (Floh, 2013). The S-O-R model, along with the concept of servicescapes, has been a key theoretical underpinning for various studies on customer behavior (Bitner 1992) (Ezeh, 2007)

Research Methodology

The research methodology employed a quantitative approach, utilizing a sample size of 203 participants predominantly from high-income brackets in specific Indian states, and distributed surveys aimed at understanding impulsive buying behavior, while acknowledging potential biases and uncertainties related to self-reported data.

Research Objective

- To identify the significant factors contributing to impulsive behavior online.

- To pinpoint factors with a positive impact on impulsive behavior in the B2C segment.
- To assess the extent of differences in impulsive buying frequency between women and men.

Research Design: The research design employed is descriptive, focusing on detailing the impact of various factors on impulsive purchases among Indian shoppers.

Software Used: Tableau is utilized for data analysis as it provides superior data visualization compared to SPSS. The data is collected through online questionnaires for broad outreach and effectiveness.

Sampling: The sampling method is non-probabilistic, and the sample size consists of 203 respondents.

Method of Data Collection: A combination of secondary and primary data collection methods is employed. Secondary data is gathered from published research papers, and primary data is collected through an online questionnaire. The Likert scale is used to record respondent attitudes.

Scale Used: The Likert scale is utilized in the questionnaire to assess respondent attitudes toward the presented questions.

Data Analysis & Interpretation

To determine factors contributing to impulsive online purchases, 203 responses were collected through a Google Forms survey. The survey aimed to identify factors positively influencing impulsive purchasing decisions and explore any correlation between disposable income and the propensity for impulsive purchases. The majority of respondents fell within the income bracket of INR 5-10 lakhs p.a., followed by those in the INR 10 lakhs p.a. bracket. The survey responses are further detailed, and interpretations are made with the assistance of data analytics.

Demographic Profile

The demographic breakdown of respondents encompasses age and income brackets. The majority of respondents are female, constituting 51.23% of the total, while 48.77% are male. The income distribution categorizes respondents into four groups based on their annual income, ranging from less than INR 2.5 lakh to more than INR 10 lakh: 20.2% of respondents fall into the income bracket of less than INR 2.5 lakh, 18.72% of respondents belong to the INR 2.5 to 5 lakh income category, 33.99% of respondents fall within the INR 5 to 10 lakh income range and the remaining 27.09% of respondents earn more than INR 10 lakh annually.

Analysis of Respondent's Online Purchase Frequency

The analysis of the respondents' online purchase frequency, indicates how often they engage in online shopping. Respondents were categorized into four groups: The largest group, comprising 35.47% of recorded responses, consists of respondents who shop online 2-4 times a week. Following closely, 22.66% of respondents reported making online purchases exclusively during sales. A significant portion, 21.18% of respondents, indicated shopping online daily. The remaining 20.69% of respondents reported a lower online shopping frequency, purchasing less than 2 times a week, equivalent to once a week.

Analysis of Respondents

A detailed summary of responses sheds light on various variables influencing impulsive purchase decisions among respondents. Notably, a significant portion, comprising 35.8% who strongly agree and 26.5% who agree, indicates a frequent tendency to make impulsive online purchases. Additionally, 37.3% strongly agree and 28.4% agree that they often buy more than initially planned. Preferences and beliefs also play a crucial role, with a majority expressing a preference for easy navigation (58.8% strongly agree) and visually appealing shopping apps (55.9% strongly agree). Furthermore, respondents acknowledge the influence of advertising, with 28.9% strongly agreeing that ads convince them to make unnecessary purchases. Limited-time offers and discounts also drive impulsive buying, as indicated by 35% strongly agreeing that they shop for unnecessary items due to time-limited offers. Payment methods and motivators, such as EMI and UPI, exhibit varied responses, while social factors and trends significantly impact purchasing decisions. The browsing patterns of respondents reveal that ease of payment often results in more purchases than necessary (41.7% strongly agree), and a substantial percentage (49%) acknowledges browsing products for leisure without placing orders. This comprehensive overview underscores the multifaceted nature of factors contributing to impulsive online purchases.

Descriptive Statistics

The descriptive statistics has been done with the help of a data mining tool IBM SPSS to better understand the data and to reduce the dimensions of the data set received.

Descriptive Statistics

	Mean	Std Deviation	Analysis N	Missing N
Shop spontaneously online	3.60	1.430	203	0
Buying more than planned	3.67	1.394	203	0
Later usage of product	3.69	1.381	203	0
Easy and chaos free navigation	4.39	.902	203	0
Visually appeal of apps	4.32	1.010	203	0
Minimal steps to shop.	4.35	1.016	203	0
New feature entices purchase	3.88	1.316	203	0
Add last minute offers	3.91	1.269	203	0
Constant ads	3.07	1.559	203	0
Exploring ads	3.47	1.401	203	0
Trendy launch	3.69	1.280	203	0
Limited time offer	3.49	1.480	203	0
Subscriptions with discounts impulsive	3.35	1.456	203	0
EMI based purchase	2.98	1.635	203	0
Payment methods saved	4.23	1.164	203	0
UPI motivates for products	3.73	1.385	203	0
Pay later to purchase products	3.51	1.562	203	0
Need to own premium products	3.57	1.476	203	0
Updated with trends	3.76	1.284	203	0
Expressing individuality through clothes	3.82	1.271	203	0
Easy Payments inc purchases	3.94	1.201	203	0
More browsing = purchasing product	3.69	1.409	203	0
Sure purchase with browsing	3.86	1.219	203	0
Leisure browsing	3.99	1.301	203	0

The table indicates the descriptive statistics, for each variable and the analysis N which in this case is 203 and there is no missing data.

KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.940
Bartlett's Test of Sphericity	Approx Chi-Square	2818.889
	df	276
	Sig.	<.001

a. Based on correlations

The Kaiser-Meyer-Olkin (KMO) value, measuring sampling adequacy, surpasses 0.6 with a calculated value of 0.940. This outcome strongly indicates that the sample size is sufficient, and there are an ample number of items for each factor under consideration. Moreover, the Bartlett test yields a statistically significant result, being less than 0.05.

Communalities

	Raw Initial	Rescaled Initial
Shop spontaneously online	2.044	1.000
Buying more than planned	1.943	1.000
Later usage of product	1.906	1.000
Easy and chaos free navigation	.814	1.000
Visually appeal of apps	1.021	1.000
Minimal steps to shop	1.032	1.000
New feature entices purchase	1.732	1.000
Add last minute offers	1.610	1.000
Constant ads	2.431	1.000
Exploring ads	1.963	1.000
Trendy launch	1.639	1.000
Limited time offer	2.192	1.000
Subscriptions with discounts impulsive	2.120	1.000
EMI based purchase	2.673	1.000
Payment methods saved	1.354	1.000
UPI motivates for products	1.919	1.000
Pay later to purchase products	2.439	1.000
Need to own premium products	2.177	1.000
Updated with trends	1.649	1.000
Expressing individuality through clothes	1.615	1.000
Easy Payments inc purchases	1.442	1.000
More browsing = purchasing product	1.985	1.000
Sure purchase with browsing	1.486	1.000
Leisure browsing	1.693	1.000

Extraction Method: Principal Component Analysis

The communalities, all exceeding 0.4, are deemed acceptable, with many surpassing 0.6, which is considered ideal. Higher communalities imply that the extracted components or factors effectively account for the variance in the data. Communalities essentially express the portion of variance in each variable that can be elucidated through Principal Component Analysis (PCA).

Total Variance Explained

	Component	Initial Eigenvalues [a]			Rotation Sums of Squared Loadings		
		Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Raw	1	20.462	47.719	47.719	11.191	26.098	26.098
	2	2.557	5.963	53.682	8.783	20.483	46.582
	3	2.081	4.852	58.534	3.608	8.414	54.996
	4	1.852	4.319	62.852	3.369	7.857	62.852
	5	1.571	3.664	66.517			
	6	1.421	3.314	69.830			
	7	1.367	3.187	73.018			
	8	1.198	2.795	75.812			
	9	1.072	2.500	78.312			
	10	1.023	2.385	80.697			
	11	.951	2.218	82.915			
	12	.848	1.977	84.892			
	13	.788	1.838	86.730			
	14	.750	1.768	88.499			
	15	.710	1.655	90.154			
	16	.644	1.502	91.656			
	17	.630	1.108	93.144			
	18	.587	1.369	94.514			
	19	.535	1.249	95.762			
	20	.432	1.008	96.770			
	21	.400	.933	97.704			
	22	.383	.893	98.595			
	23	.310	.724	99.320			
	24	.292	.680	100.000			
Rescaled	1	20.462	47.719	47.719	5.767	24.030	24.030
	2	2.557	5.963	53.682	4.618	19.240	43.270
	3	2.081	4.852	58.534	2.678	11.159	54.429
	4	1.852	4.319	62.852	1.499	6.247	60.676
	5	1.571	3.664	56.517			
	6	1.421	3.314	69.830			
	7	1.367	3187	73.018			
	8	1.198	2.795	75.812			
	9	1.072	2.500	78.312			
	10	1.023	2.385	80.597			
	11	.951	2.218	82.915			
	12	.848	1.977	84.892			
	13	.788	1.838	86.730			
	14	.758	1.708	88.499			
	15	.710	1.655	90.154			
	16	.644	1.502	91.666			
	17	.638	1.488	93.144			
	18	.507	1.369	94.514			
	19	.535	1.248	95.762			
	20	.432	1.008	96.770			
	21	.400	.933	97.704			
	22	.383	.893	90.596			
	23	.310	.724	99.320			
	24	.292	.680	100.000			

The analysis has identified four factors, equating to components, representing an assumed reduction of the 24 variables to four underlying factors. The first component elucidates 26.098% of the data, the second component clarifies 20.483% of the data, the third factor is presumed to account for 8.414% of the data, and the fourth factor is estimated to represent 7.857% of the data. Collectively, these four factors explicate 62.852% of the variance in the data.

Rotated Component Matrix[a]

	Raw Component				Rescaled Component			
	1	2	3	4	1	2	3	4
UPI motivates for products	1.066	.365	.130	.146	.770	.264	.094	.106
Later usage of product	.952	.404	.287	-.033	.690	.292	.208	-.024
More browsing = purchasing product	.960	.639	-.043	.229	.682	.454	-.031	1.63
Limited time offer	1.009	.671	.136	.143	.681	.453	.092	.097
Constant ads	1.057	-.123	.438	.693	.678	-.079	.281	.444
Buying more than planned	.891	.710	.199	.036	.640	.509	.143	.026
Easy Payments inc purchases	.742	.425	.161	.081	.618	.354	.134	.067
Exploring ads	.856	.424	.215	.501	.611	.302	.153	.357
Trendy launch	.778	.657	.329	-.025	.608	.514	.257	-.019
Shop spontaneously online	.738	.730	.371	-.099	.516	.511	.260	-.069
Add last minute offers	.556	.399	.526	-.089	.439	.315	.414	-.070
Updated with trends	.286	1.024	.285	.233	.222	.797	.222	.181
Need to own premium products	.475	1.021	.351	.395	.322	.692	.238	.268
Expressing individuality through clothes	.443	.748	.457	.291	.349	.588	.359	.229
Subscriptions with discounts impulsive	.787	.831	.108	.292	.540	.571	.074	.201
Pay later to purchase products	.696	.887	.242	.419	.446	.568	.155	.268
Leisure browsing	.377	.738	.216	-.258	.290	.567	.166	-.199
New feature entices purchase	.487	.663	.450	.132	.370	.504	.342	.101
Easy and chaos free navigation	.101	.151	.609	.008	.112	.167	.675	.009
Minimal steps to shop	.077	.161	.685	-.085	.076	.159	.674	-084
Visually appeal of apps	.213	.166	.608	.033	.211	.165	.602	.033
Sure purchase with browsing	-.175	-.049	.685	.524	-.144	-.040	.562	.430
Payment methods saved	.444	.216	.467	.094	.382	.186	.402	.081
EMI based purchase	.529	.622	-.178	1.259	.323	.380	-.109	.770

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization [a]

a. Rotation converged in 11 iterations

The pivotal result of Principal Component Analysis (PCA) is the Rotated Component Matrix, commonly known as the loadings. This matrix elucidates the correlation between each variable and the estimated components. The initial factor discerned from the analysis pertains to UPI-driven motivations for product selection. The second factor identified is aligned with staying current with trends, while the third factor emphasizes easy and chaos-free navigation. The final factor pinpointed is centered around making purchases based on EMI considerations.

Results and Conclusion

As the impact of COVID-19 diminished, there was a notable upswing in digital acceptance, marking the Indian economy's return to stability. This period witnessed a rise in disposable income, leading to an increase in both planned and impulsive purchases. The research paper's analyses reveal several factors that positively influence impulsive buying behavior during shopping. Impulsive purchases, characterized by spontaneous decisions without pre-planning, are influenced by specific strategies employed by marketers. These strategies effectively prompt potential customers to relinquish self-control, making purchase decisions without extensive consideration.

The impulsive buying process is described in the paper using the Stimulus-Organism-Response (SOR) model. Here, stimuli refer to marketing strategies or design experiences, organisms are individuals interacting with or exposed to these stimuli, and the response is their purchase behavior. The report delves into how the SOR model operates and highlights stimuli that marketers find effective in inducing impulsive behavior among potential customers.

The report identifies various factors, including User Interface & User Experience, Unified Payments Index, Hedonic motivation, Equated Monthly Instalment, Advertisements, and browsing time, as influential in online impulsive purchase decisions made by customers.

Conclusion

The report provides an understanding of impulsive buying behavior, highlighting its distinctions from pre-planned purchasing decisions and the observed increase in impulsive purchases over the past few years. Drawing on existing research in the field of impulsive buying behavior, this paper introduces a novel factor that has emerged as a particularly influential contributor. While previous studies underscored the importance of factors like internal and external motivation and marketing stimuli such as advertisements, discounts, and novelty, there has been a shift in Indian buying patterns in recent years.

With a surge in disposable income, this research explores the changing landscape of buying habits and decision-making influences. Specifically, the paper investigates the significance of new elements such as the user interface and user experience of shopping apps, browsing time, and convenient payment methods like UPI and pay later features in shaping impulsive purchases. The analysis of collected data indicates that these new factors play a substantial role in influencing impulsive purchase decisions among potential customers. The four key factors that prominently emerged from the analysis are UPI, motivation, UI-UX, and EMI-based payments.

Additionally, the research paper delves into the correlation between purchasing power (i.e., disposable income) and the frequency of online impulsive purchases, revealing a noteworthy connection. In summary, the paper thoroughly examines and analyzes the recent changes in the factors influencing purchase decisions, providing valuable insights into the evolving landscape of consumer behavior.

Limitations

The study encompasses a sample size of 203, with a predominant 79.8% of respondents falling within the income bracket above 2.5 lakhs. While the survey was distributed across diverse locations throughout India, the lack of representation suggests a potential gap in capturing varied patterns of impulsive purchasing across regions. The majority of responses originate from participants in cities within West Bengal, Maharashtra, Uttar Pradesh, Delhi, Karnataka, and Rajasthan, with significantly fewer contributions from other states. This distribution raises the possibility of biases specific to the known demographics, emphasizing the need for a more comprehensive dataset to mitigate potential biases.

Moreover, there exists a likelihood that respondents may not openly admit to engaging in impulsive shopping, introducing a potential source of uncertainty regarding their reported buying frequency. This acknowledgment underscores the importance of considering potential self-reporting biases in the study's findings.

Works Cited

Arne Floh, Maria Madlberger. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications, 12*, 425-439.

Arrafi, I. M. (2021). Impulse Buying Model for Business-to-Consumer E-Commerce in Saudi Arabia. *iBusiness, 13*, 81-102.

Baumeister, R. (2002). Yielding to temptation: self-control failure, impulsive purchasing: and consumer behavior. *Journal of Consumer Research, 28,*, 670-676.

Beatty, S. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing 74(2)*, 169-191.

Bickart, B. a. (2001). Internet forums as influential sources of consumer information. *Journal of Interactive Marketing, Vol. 15 No. 3*.

Choudhary, D. S. (2014). Study of Impulse Buying Behavior of Consumers. *International Journal of Advance Research in Computer Science and Management Studies, 2*, 1-4.

Chunling Yu, Mike Bastin. (2010). Hedonic shopping value and impulse buying behavior in transitional economies: A symbiosis in the Mainland China marketplace. *Journal of Brand Management*, 105-114.

Dr. C. Swarnalatha, S. S. (2018). Impulse Buying and Purchase Decision. *International Journal of Management (IJM), Volume 9, Issue 2*, 88-92.

Ezeh, C., and Harris, L. C. (2007). Servicescape research: a review and a research agenda. *Marketing Review*, 59-78.

Haugh, L. (1983). Defining and redefining. *Advertising Age 14(2)*, 44.

heon-sik., J. (2015). A Study on the Mobile Game User Characteristic and Mobile Game Oriented. *The Korea Contents Society, 5*, 389-390.

Hoch, S. L. (1991). Time inconsistent preferences and consumer self-control. *Journal of Consumer Research, 17(4)*, 492-507.

Hosseini, S. H. (2020). The effect of price promotions on impulse buying: the mediating role of service innovation in fast moving consumer goods. *International Journal of Business Information Systems 33(3)*, 320-336.

Hyo-Jung Chang, M. E.-N. (2011). Application of the Stimulus-Organism-Response model to the retail environment: the role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 233-249.

Kim Piew Lai, Siong Choy Chong, Hishamuddin Bin Ismail, David Yoon Kin Tong. (2002). An explorative study of shopper-based salient e-servicescape attributes: A Means-End Chain approach. *Information & Management, 39*, 431-444.

Kim, S. (2014). A Study on the UX/UI of Smart Mobile Remote Control App in the Development Trend of NUI. *Journal of Korea Design Knowledge, 29*, 83-92.

Louis Yi-Shih Lo, S.-W. L.-Y. (2016). Motivation for online impulse buying: A two-factor theory perspective. *International Journal of Information Management 36*, 759-772.

Madhavaram, L. D. (2004). Exploring impulse purchasing on the Internet. *Advances in Consumer Research, 31 (1)*, 59-66.

Malik, M. E. (2013). Impact of Brand Image and Advertisement on Consumer Buying Behavior. *World Applied Sciences Journal, 23*, 117-122.

McKinsey. (2022, june 07). *Mind the gap*. Retrieved from MCKinsey & Company: https://www.mckinsey.com/~/media/mckinsey/email/genz/2022/06/07/2022-06-07b.html

Mehrabian, Albert, and Russell, James A. (1974). An Approach to Environmental Psychology. *MIT Press, Cambridge MA*.

Mind, M. (2022, Feb 27). *Marketing Mind*. Retrieved from LinnkedIn-Marketing Mind: https://www.linkedin.com/posts/marketingmindin_marketingmind-whatsbuzzing-activity-7035603130964750336-XydT?utm_source=share&utm_medium=member_android

Moe, W. W. (2003). Buying, searching, or browsing: Differentiating between online shoppers using in-store navigational clickstream. *Journal of Consumer Psychology 13(1)*, 29-39.

Mohan, G. S. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing, 47(10)*, 1711-1732.

Niazi, G. S. (2012). Effective Advertising and Its Influence on Consumer Buying Behavior. *Information Management and Business Review 4*, 114-119.

Nyoman Sri Handayani, K. R. (2020). Website Quality Affects Online Impulse Buying. *SSRG International Journal of Economics and Management Studies Volume 7 Issue 12*, 16-24.

Nyoman Sri Handayani, K. R. (2020). Website Quality Affects Online Impulse Buying Behavior (OIBB): Moderating Effects of Sales Promotion and Digital Wallet Use. *SSRG International Journal of Economics and Management Studies, vol 7, Issue 12*, 16-24.

Park, E. K. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research, Vol. 65 No. 11*, pp: 1583-1589.

Pocheptsova, O. A. (2009). Deciding without resources: resource depletion and choice in context. *Journal of Marketing Research, 46*, 344-355.

Rengan, R. (2022, October 31). *Factors that influence Indian Gen Z while making online payments*. Retrieved from The Times of India: https://timesofindia.indiatimes.com/blogs/voices/factors-that-influence-indian-gen-z-while-making-online-payments/

Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research, 14(2)*, 189-199.

S. Kemp, F. Bolle. (1999). Preferences in distributing scarce goods. *Journal of Economic Psychology, 20(1)*, 105-120.

Sevgin A. Eroglu, K. A. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research, vol 54 issue 2*, 177-184.

Shree, S. P. (2021). Digital payments and consumer experience in India: a survey based empirical study. *Journal of Banking and Financial Technology, 5(1)*, 1-20. Retrieved from https://doi.org/10.1007/s42786-020-00024-z

Si-Jung Kim, D.-E. C. (2016). Technology Trends for UX/UI of Smart Contents. *The Korea Contents Association Review, 14*, 29-33.

Smith, B., & Linden, G. (2017). Two decades of recommender Systems at Amazon.com. *IEEE Internet Computing 21(3)*, 12-18.

Stern, H. (1962). The significance of impulse buying today. *Journal of Marketing, 26*, 59-62.

Supriya M. Kalla, A.P. Arora. (2011). Impulse Buying: A Literature Review. *Global Business Review 12*, 145.

Trang Quang LE, W.-Y. W.-K. (2022). The Extended S-O-R Model Investigating Consumer Impulse Buying Behavior in. *Journal of Distribution Science 20-2*, 1-9.

Tyrväinen, O. K. (2020). Personalization and hedonic motivation in creating customer experiences and loyalty in omnichannel retail. *Journal of Retailing and Consumer Services, 57*.

Verhagen, T., & Dolen, W. M. V. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information and Management, 48*, 320-327.

Vinaykumar, R. (2021, August 17). *Online shopping in India gets pandemic boost, e-retail market grows 25% in FY21*. Retrieved from Business today bt: https://www.businesstoday.in/latest/economy/story/online-shopping-in-india-gets-pandemic-boost-e-retail-market-grows-25-in-fy21-304340-2021-08-17

Williams, R., and Dargel, M. (2004). From servicescape to 'cyberscape'. *Marketing Intelligence & Planning, 22*, 310-320.

Wonjin Jung, H. R. (2018). An Exploratory Study of the Interface Design Factors Affecting the User Intention to Use Mobile Applications. *International Journal of Advanced Science and Technology Vol.119*, 103-110.

Yang Zhao, Y. L. (2021). A Meta-Analysis of Online Impulsive Buying and the Moderating Effect of Economic Development Level. *Information Systems Frontiers: Springer Science+Business Media, LLC, part of Springer Nature 2021*.

Zou, T. (2018). Online impulse buying behavior amongst undergraduate students in Tianjin the people's republic of China. *ABAC Journal Vol.38 No.2*, 94-113.

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 51-68

Navigating Retail Landscapes: A Comparative Analysis of Consumer Preferences between In-Store and Online Shopping in SPSR Nellore City

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Abstract

Aim / purpose: The aim of the descriptive research study was to investigate and understand A comparative analysis of consumer preferences between in-store and online shopping in Nellore city. The study seeks to examine the consumer preferences between in-store and online shopping and to suggest the navigating factors which change the retail landscapes. *Outcome*: The outcome of the research is to study the uncover key consumer preferences towards in-store and online shopping in retail market of Nellore. Further, the outcome of the research will provide recommendations for marketers and businesses to develop strategies on which to emphasis more either online or in-store in retail market landscape to sustain in competitive market. *Research Design / Methodology / Approach*: The study adopt a descriptive research design by utilizing both quantitative and qualitative data. The convenience sampling strategy employed to select respondents who have recent online buying experience. *Statistical Tools*: Researcher applied both descriptive and inferential statistical tools. The statistical tools like: ANOVA, correlation, regression and other descriptive statistics. *Generalizability*: The research addresses the potential generalizability of the outcome, where need arises to assess the consumer behavior with respect to mediating effect of online buying behavior. *Novelty*: The research introduces newness by uniquely focusing on how retail markets navigating by doing a comparative analysis on in-store and online shopping to offer meaningful strategies for the business owners and marketers to gain competitive advantage.

Keywords: Business Strategy, Consumer Preferences, In-Store Shoppinng, Navigating Retail Landscapes, Online Shopping, Etc.

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Introduction

Shopping has changed as a result of the influence of technology most of the people preferring online shopping to the traditional In-store shopping. This trend took center stage in the past decade with many retail giants integrating the two approaches to achieve maximum outcome. This research aims to understand the comparison between online shopping & In- store shopping and consumer behavior towards these modes of shopping. It is in this regard, a fundamental understanding of consumer preferences towards in-store and online shopping is gaining great importance. The present study examines the comparative analysis between in-store and online shopping in Nellore city of Andhra Pradesh.

Statement of the Problem

The present research is carried out to examine the consumer preferences between in-store and online shopping and identify the reasons on which they are more benefitted and also factors influences for dissatisfaction.

Research Objectives

- To study the consumer preferences towards online shopping
- To study the consumer preferences towards in-store shopping
- To identify the factors influencing towards in-store and online shopping
- To put forward a few recommendations to marketers and business owners

Significance of the Study

Consumer preferences towards in-store and online shopping are driving customer towards shopping, creating satisfied customer is difficult especially in an online environment where the interaction between the company personnel and customer is minimal, in case of in-store shopping there is possibility to establish relationship and sustaining profitability therefore the factors leading to satisfied customer is of paramount importance. For this reason, this study examines a comparative analysis between online and in-store shopping.

Research Design and Data Collection Method

The main aim of the research is to do comparative study towards online and in-store shopping. This is accomplished with structured frame work which contains the following elements.

Research Design: The researcher has followed Descriptive Research Design, to identify the research problem characteristics. It is a conclusive and structured study.

Sample Design: The researcher has used Convenience sampling method to collect the data from sample respondents. This study is descriptive in nature and used primary data to analyse and interpret the results.

Sample size: In this the researcher has chosen 116 sample respondents from both online and in-store shopping.

Sampling Area: The researcher has selected SPSR Nellore City of Andhra Pradesh as study area.

Statistical Tool: Independent sample t test and ANOVA test are applied for data analysis.

Sources of Data: Primary and Secondary data has used for data collection.

Primary Data: Questionnaire given to 116 respondents.

Secondary Data: Websites and online journals, Published reports & Review of literature from published articles

Review of Literature

A review of earlier studies is carried out in the following paragraphs this review outlines a small number of focused studies with specific references to the theme of study.

Santhosh (2022) online purchasing plays a significant role in the twenty-first century. Under this condition online shopping became more convenient and suitable way of purchasing goods and services. The internet has changed the method of purchasing goods and services by customers. In this connection majority of the businesses have started to use the internet with the intention of reducing marketing costs, as a result the prices of their goods and services will become lower in order to remain competitive advantage.

Datta and Dhanjay roy (2022) Online shopping in India have grown rapidly and are expected to rise, majority of the Indian consumers still prefer the so called offline shopping experience because of disparities between consumer buying styles in online and offline shopping so the marketer carefully formulate strategies to both online and offline.

Kim et.al (2021) has been conducted a research on "Do information and service quality affect perceived privacy protection, satisfaction, and loyalty? Evidence from a Chinese O2O-based mobile shopping application" with a sample of 1063 questionnaire responses out of these majority of the respondents opinioned that usage of sophisticated technology and internet the e-commerce business is ever increasing.

Muntaqheem and Raiker (2019) conducted a research work on "A Study on Consumer Behaviour towards Online and Offline Shopping", with a 100 sample size witnessed that Flipkart and jabong are the key players in the digital retail marketing and majority of the customers showing more interest towards online shopping now-a-days. Therefore, there is a huge scope of digital marketing in future days.

Satyavani, B. (2020). Conducted research on Consumer Shopping Behaviour-An Empirical Study: (An Analysis with Reference to Select Areas of Andhra Pradesh).in this paper the researcher emphasized that the present business men aims at customer delight rather customer satisfaction because the modern marketing is customer centric everything is decided by customers by keeping in view the marketers has to carefully plan on the customized marketing mix.

Nittal, R (2015) The researcher has conducted research in selected cities of Andhra Pradesh With a sample of 1500 with internet users and identified that perceived risk and price positively influenced online shopping behaviour.

Thorat (2022) with increasing demand of online shopping among the consumers, it is identified that customer satisfaction depends on variety of factors. Offline shopping has its own importance within the population and is widely popular dye to its accessibility.

Demographic profile of the respondents

Sl. No.	Demographic Variables	Categories	No of Responses	Percentage
1	Gender	Male	73	62.9
		Female	43	37.1
2	Age	20-30	83	71.6
		30-40	21	18.1
		40-50	12	10.3
		50-60	0	0
3	Educational Qualification	SSC	0	0
		Inter	3	2.6
		UG	28	24.1
		PG	85	73.3
4	House hold income	10-20	25	21.6
		20-30	24	20.7
		30-40	19	16.4
		40-50	13	11.2
		50 and above	35	30.2
5	Employment Status	Employed	61	52.6
		Self- Employed	24	20.7
		Seeking for opportunities	29	25.0
		Part time job	1	.9
		Others	1	.9
6	Purchase frequency	Online	64	55.2
		In-store	52	44.8

The sample founds about 62.9% male and 37.1% female respondents, maximum number of the respondents is male category. The age group of the respondents were between 20-30 years (71.6%), 30-40 years (18.1%), 40-50 (10.3%), 50-60 (0%).Therefore most of the respondents are young of 20-30 years. The respondents had the educational qualification of SSC (0%), Intermediate (2.6%), UG (24.1%) and PG (73.3%). Thus, the majority of the respondents held the educational qualification of PG. The monthly income of the respondents was between 10-20 thousand (21.6%), 20-30 thousand (20.7%), 30-40 thousand (16.4%), 40-50 thousand (11.2%) and 50 and above thousands (30.2%). Hence, the maximum part of respondents was have 50 and above thousand. The employment status of the respondents was employed (52.6%), Self-employed (20.7%), seeking for opportunities (25.0%), part time (.9%) and others (.9%).Therefore, most of the respondents have employed. Purchase frequency of the respondents was online (55.2%), in-store (44.8%). Hence, highest numbers of the respondents were purchased through online.

Independent Sample t-Test

An independent sample t-test examines whether there is a significant difference in a quantitative/numerical variable between the two groups or categories of respondents. The independent variable must be categorical with only two categories (dichotomous), the dependent variable must be quantitative/numerical. Two group means are compared to determine whether they are significantly different from each other. You need to examine several statistics, one of which is the p-value. This value must be .05 or below to determine whether a significant difference between the two groups exist.

H_a(1): There is a significantly positive relationship between gender of the respondents with respect to online and in-store purchase behaviour.

	Where do you purchase the products frequently?	N	Mean	Std. Deviation	t-Value	F-Value	Sig. (2-tailed)
What is your gender?	Online	64	1.3438	.47871	-.660	1.607	.511
	In store	52	1.4038	.49545			

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is observed that out of 116 sample size irrespective of gender preferring to purchase products from both in-store and online platforms. The mean values for online and in-store purchase with respect gender are 1.3438 and 1.4038 and corresponding standard deviation are 0.47871 and 0.49545. The significant value (p= 0.511) which is insignificant at 5% level. Therefore, the distribution is insignificant. There is no significant difference between gender of the respondents with respective online and in-store purchase.

H_a(2): There is a significantly positive relationship between age of the respondents with respect to online and in-store purchase behaviour.

	Where do you purchase the products frequently?	N	Mean	Std. Deviation	t-Value	F-Value	Sig. (2-tailed)
What is your approximate age?	Online	64	2.3125	.58757	-1.317	6.995	.009
	In store	52	2.4808	.75382			

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is observed that out of 116 sample size with respect to age group preferring to purchase products from both in-store and online sources. The mean values for online and in-store purchase with respect gender are 2.3125 and 2.4808 and corresponding standard deviation are 0.58757 and 0.75382. The significant value (p= 0.009) which is significant at 5% level. Therefore, the distribution is significant. There is significant difference between age group of the respondents with respective online and in-store purchase.

H_a(3): There is a significantly positive relationship between educational qualification of the respondents with respect to online and in-store purchase behaviour.

	Where do you purchase the products frequently?	N	Mean	Std. Deviation	t-Value	F-Value	Sig. (2-tailed)
What is your educational qualification?	Online	64	3.6406	.54532	-1.588	7.753	.006
	In store	52	3.7885	.45747			

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is revealed that out of 116 sample size related to educational qualification the respondents prefer to purchase products from both in- store and online sources. The mean values for online and in-store purchase with respect educational qualification are 3.6406 and 3.7885 and corresponding standard deviation are .54532 and .45747. The significant value (p= 0.006) which is significant at 5% level. Therefore, the distribution is significant. There is significant difference between educational qualification of the respondents with respective online and in-store purchase.

$H_a(4)$: There is a significantly positive relationship between Employment status of the respondents with respect to online and in-store purchase behaviour.

	Where do you purchase the products frequently?	N	Mean	Std. Deviation	t-Value	F-Value	Sig. (2-tailed)
What is your employment status?	Online	64	1.7656	.84969	-.021	1.334	.251
	In store	52	1.7692	1.00226			

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is identified that out of 116 sample size irrespective of employment status the respondents prefer to purchase products from both in-store and online sources. The mean values for online and in-store purchase with respect employment status are 1.7656 and 1.7692 and corresponding standard deviation are 0.8469 and 1.00226. The insignificant value (p= 0.251) which is insignificant at 5% level. Therefore, the distribution is insignificant. There is no significant difference between employment status of the respondents with respective online and in-store purchase.

$H_a(5)$: There is a significantly positive relationship between Income of the respondents with respect to online and in-store purchase behaviour.

	Where do you purchase the products frequently?	N	Mean	Std. Deviation	t-Value	F-Value	Sig. (2-tailed)
What is your annual household income?	Online	64	3.1406	1.55193	.484	.066	.789
	In store	52	3.0000	1.55929			

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is shown that out of 116 sample size irrespective of annual household income of the respondents prefer to purchase products from both in- store and online sources. The mean values for online and in-store purchase with respect annual household income are 3.1406 and 3.0000 and corresponding standard deviation are 1.55193 and 1.55929. The insignificant value (p= 0.789) which is insignificant at 5% level. Therefore, the distribution is insignificant. There is no significant difference between annual household income of the respondents with respective online and in-store purchase.

Analysis of Variance (ANOVA)

Once estimation of the differences exists among the means, range tests identify homogeneous subsets of means that are not different from each other. Pair-wise multiple comparisons test the difference between each pair of means and yield a matrix where asterisks indicate significantly different group means at an alpha level of 0.05.

H_a(6): There is a significantly positive relationship between age of the respondents with respect to availability of products in-store retailer.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you satisfied with the availability of products in-store retailer?	20-30	83	3.5301	.94142	.771	.465
	30-40	21	3.6667	.57735		
	40-50	12	3.2500	1.28806		
	Total	116	3.5259	.92747		

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is observed that out of 116 sample size the majority of the respondents are belongs to 20-30 years age group of the respondents are satisfied regarding availability of the products in in-store and the corresponding mean value 3.5301 and the age group 30-40 years also have shown similar opinion and rest 40-50 years of age group of the respondents have shown neutral tendency regarding availability of products in in-store. The p-value is 0.465 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on availability of products at in-store.

H_a(7): There is a significantly positive relationship between age of the respondents with respect to availability of products on-line.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you satisfied with the availability of products in on-line?	20-30	83	3.5663	.91322	.350	.705
	30-40	21	3.5238	.81358		
	40-50	12	3.3333	.98473		
	Total	116	3.5345	.89861		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is identified that out of 116 sample size the greater part of the respondents are belongs to 20-30 years age group of the respondents are satisfied regarding availability of the products in online and the corresponding mean value 3.5663 and the age group 30-40 years also have same opinion and rest 40-50 years of age group of the respondents have shown neutral tendency regarding availability of products in online. The p-value is 0.705 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on availability of products at online.

H_a(8): There is a significantly positive relationship between age of the respondents with respect to exchange prices offered by online retailer for your old products.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you satisfied with the exchange prices offered by online retailer for your old products?	20-30	83	3.2048	.94687	1.769	.175
	30-40	21	3.5714	.87014		
	40-50	12	3.0000	.95346		
	Total	116	3.2500	.94063		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is notified that out of 116 sample size the maximum number of the respondents are belongs to 30-40 years age group of the respondents are satisfied regarding exchange prices offered by online retailer for your old products and the corresponding mean value 3.5714 and the age group 20-30 years and 40-50 years have shown neutral tendency regarding exchange prices offered by online retailer for your old products. The p-value is 0.175 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on exchange prices offered by online retailer for your old products.

H_a(9): There is a significantly positive relationship between age of the respondents with respect exchange prices offered by in-store retailer for your old products.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How to you satisfied with the exchange prices offered by in-store retailer for old products?	20-30	83	3.2048	.95966	1.257	.288
	30-40	21	3.0952	.76842		
	40-50	12	2.7500	1.05529		
	Total	116	3.1379	.94083		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is found that out of 116 sample size the most of the respondents are belongs to 20-30 years age group of the respondents are neutral regarding exchange prices offered by in-store retailer for your old products and the corresponding mean value 3.2048 and the age group 30-40 years and 40-50 years have also shown neutral tendency regarding exchange prices offered by in-store retailer for your old products. The p-value is 0.288 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on exchange prices offered by in-store retailer for your old products.

H_a(10): There is a significantly positive relationship between age of the respondents with respect hassle free payment with regard to online shopping.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you happy with hassle free payment with regard to online shopping?	20-30	83	3.6265	.92011	.895	.411
	30-40	21	3.8571	.79282		
	40-50	12	3.4167	1.31137		
	Total	116	3.6466	.94413		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is stated that out of 116 sample size the majority of the respondents are belongs to 30-40 years and 20-30 years age group of the respondents are satisfied with hassle free payment with regard to online shopping and the corresponding mean value 3.8571 and 3.6265. The age group 40-50 years have also shown neutral tendency regarding hassle free payment with regard to online shopping. The p-value is 0.411 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on hassle free payment with regard to online shopping.

H_a(11): There is a significantly positive relationship between age of the respondents with respect to the payment process of in-store shopping.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you feel with the payment process of in-store shopping?	20-30	83	3.7108	.90433	.111	.895
	30-40	21	3.7143	.56061		
	40-50	12	3.8333	.83485		
	Total	116	3.7241	.84015		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is indicated that out of 116 sample size the maximum number of the respondents are belongs to 40-50 years, 30-40 years and 20-30 years age group of the respondents are satisfied with the payment process of in-store shopping and the corresponding mean value 3.8333, 3.7143 and 3.7108. The p-value is 0.895 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the payment process of in-store shopping.

H_a(12): There is a significantly positive relationship between age of the respondents with respect to the replacement policy of online shopping.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you satisfied with the replacement policy of online shopping?	20-30	83	3.4699	.99189	1.136	.325
	30-40	21	3.7619	1.04426		
	40-50	12	3.2500	.96531		
	Total	116	3.5000	1.00000		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is stated that out of 116 sample size the maximum number of the respondents are belongs to 30-40 years and 20-30 years age group of the respondents are satisfied with the replacement policy of online shopping and the corresponding mean value 3.7619, 3.4699 and 3.7108. The age group 40-50 years have also shown neutral tendency regarding replacement policy of online shopping. The p-value is 0.325 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on replacement policy of online shopping.

H_a(13): There is a significantly positive relationship between age of the respondents with respect to the return product option in in-store shopping.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you feel with the return product option in in-store shopping?	20-30	83	3.6386	.97002	.953	.388
	30-40	21	3.3810	.86465		
	40-50	12	3.3333	1.15470		
	Total	116	3.5603	.97168		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The table it is notified that out of 116 sample size the greater part of the respondents are belongs to 20-30 years age group of the respondents are satisfied with respect to the return product option in in-store shopping and the corresponding mean value 3.6386. The age group 30-40 years and 40-50 years have also shown neutral tendency regarding the return product option in in-store shopping. The p-value is 0.388 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the return product option in in-store shopping.

H_a(14): There is a significantly positive relationship between age of the respondents with respect to the products available in online are reliable.

	Age Group	N	Mean	Std. Deviation	F	Sig.
Do you think that the products available in online are reliable?	20-30	83	3.4217	.96424	.288	.797
	30-40	21	3.5238	.74960		
	40-50	12	3.5833	.90034		
	Total	116	3.4569	.91739		

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is identified that out of 116 sample size the maximum number of the respondents are belongs to 40-50 years and 30-40 years age group of the respondents are satisfied with respect to the products available in online are reliable and the corresponding mean values are 3.5833 and 3.5238. The age group 20-30 years have also shown neutral tendency regarding the products available in online are reliable. The p-value is 0.797 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the products available in online are reliable.

H_a(15): There is a significantly positive relationship between age of the respondents with respect to the product available in-store are met your expectations.

	Age Group	N	Mean	Std. Deviation	F	Sig.
Do you think that the product available in-store are met your expectations?	20-30	83	3.6145	.82390	.436	.648
	30-40	21	3.6190	.66904		
	40-50	12	3.8333	.38925		
	Total	116	3.6379	.76211		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is shown that out of 116 sample size the majority of the respondents are belongs to 40-50 years, 30-40 years and 20-30 years age group of the respondents are satisfied with respect to the product available in-store are met your expectations and corresponding the mean values are 3.8333, 3.6190 and 3.6145. The p-value is 0.648 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the product available in-store are met your expectations.

H_a(16): There is a significantly positive relationship between age of the respondents with respect to the loyalty programs offered by online retailer.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you feel with the loyalty programs offered by online retailer?	20-30	83	3.4819	.87459	1.078	.344
	30-40	21	3.7143	.84515		
	40-50	12	3.2500	1.13818		
	Total	116	3.5000	.89928		

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is acknowledged that out of 116 sample size the highest number of the respondents are belongs to 30-40 years and 20-30 years age group of the respondents are satisfied with respect to the loyalty programs offered by online retailer. The corresponding mean values are 3.7143 and 3.4819. The age group 40-50 years have also shown neutral tendency regarding the loyalty programs offered by online retailer. The p-value is 0.344 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the loyalty programs offered by online retailer.

H_a(17): There is a significantly positive relationship between age of the respondents with respect to the loyalty programs offered by in-store retailer.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you feel with the loyalty programs offered by in-store retailer?	20-30	83	3.5181	.86054	.101	.904
	30-40	21	3.4286	.59761		
	40-50	12	3.5000	.79772		
	Total	116	3.5000	.80757		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is indicated that out of 116 sample size the greatest numbers of the respondents are belongs to 20-30 years and 40-50 years age group of the respondents are satisfied with respect to the loyalty programs offered by in-store retailer. The corresponding mean values are 3.5181 and 3.4819. The age group 30-40 years have also publicized neutral tendency regarding the loyalty programs offered by in-store retailer. The p-value is 0.904 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the loyalty programs offered by in-store retailer.

H_a(18): There is a significantly positive relationship between age of the respondents with respect to the credit facility and pay later option influencing to buy product online.

	Age Group	N	Mean	Std. Deviation	F	Sig.
How do you feel with the credit facility and pay later option influencing to buy product online?	20-30	83	3.6386	.95736	3.785	.026
	30-40	21	4.0000	.70711		
	40-50	12	3.0833	.99620		
	Total	116	3.6466	.94413		

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is revealed that out of 116 sample size the majority of the respondents are belongs to 30-40 years and 20-30 years age group of the respondents are satisfied with respect to the credit facility and pay later option influencing to buy product online. The corresponding mean values are 4.0000 and 3.6386. The age group 40-50 years have also exposed neutral tendency regarding the credit facility and pay later option influencing to buy product online. The p-value is 0.026 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the credit facility and pay later option influencing to buy product online.

H_a(19): There is a significantly positive relationship between age of the respondents with respect to the credit facility and payment options influencing to buy product in-store.

	Age Group	N	Mean	Std. Deviation	F	Sig.
Do you feel that the credit facility and payment options influencing to buy product in-store?	20-30	83	3.5422	.87375	3.306	.040
	30-40	21	3.5238	1.03049		
	40-50	12	2.8333	.83485		
	Total	116	3.4655	.91776		

Sources: Filed Survey Hypothesis: In-Significant at 5%

The above table it is shown that out of 116 sample size the maximum number of the respondents are belongs to 20-30 years and 30-40 years age group of the respondents are satisfied with respect to the credit facility and pay later option influencing to buy product in-store. The corresponding mean values are 3.5422 and 3.5238. The age group 40-50 years have also exposed neutral tendency regarding the credit facility and pay later option influencing to buy product in-store. The p-value is 0.040 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the credit facility and pay later option influencing to buy product in-store.

H_a(20): There is a significantly positive relationship between age of the respondents with respect to the online promotional programs influencing you to buy product online.

	Age Group	N	Mean	Std. Deviation	F	Sig.
Do you feel that the online promotional programs influencing you to buy product online?	20-30	83	3.6506	.94267	1.801	.170
	30-40	21	4.0476	.66904		
	40-50	12	3.5000	1.31426		
	Total	116	3.7069	.95113		

Sources: Filed Survey Hypothesis: In-Significant at 5%

From the above table it is indicated that out of 116 sample size the greater part of the respondents are belongs to 30-40 years, 20-30 years and 40-50 years age group of the respondents are satisfied with respect to the online promotional programs influencing you to buy product online. The corresponding mean values are 4.0476, 3.6506 and 3.5000. The p-value is 0.170 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the online promotional programs influencing you to buy product online.

H_a(21): There is a significantly positive relationship between age of the respondents with respect to in-store promotional programs influencing you to buy product.

	Age Group	N	Mean	Std. Deviation	F	Sig.
Do you feel that in-store promotional programs influencing you to buy product?	20-30	83	3.4217	1.01357	2.470	.089
	30-40	21	3.8095	.60159		
	40-50	12	3.0833	.90034		
	Total	116	3.4569	.95455		

Sources: Filed Survey　　Hypothesis: In-Significant at 5%

The above table it is stated that out of 116 sample size the highest part of the respondents are belongs to 30-40 years age group of the respondents are satisfied with respect to in-store promotional programs influencing you to buy product. The corresponding mean values are 3.8095. The age group 20-30 years and 40-50 years have also exposed neutral tendency regarding the age group 40-50 years have also exposed neutral tendency regarding the credit facility and pay later option influencing to buy product in-store. The p-value is 0.089 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on in-store promotional programs influencing you to buy product.

Findings

- The mean values for online and in-store purchase with respect gender are 1.3438 and 1.4038. The significant value (p = 0.511) which is insignificant at 5% level. Therefore, the distribution is insignificant. There is no significant difference between gender of the respondents with respective online and in-store purchase.
- The mean values for online and in-store purchase with respect gender are 2.3125 and 2.4808. The significant value (p = 0.009) which is significant at 5% level. Therefore, the distribution is significant. There is significant difference between age group of the respondents with respective online and in-store purchase.
- The mean values for online and in-store purchase with respect educational qualification are 3.6406 and 3.7885. The significant value (p = 0.006) which is significant at 5% level. Therefore, the distribution is significant. There is significant difference between educational qualification of the respondents with respective online and in-store purchase.
- The mean values for online and in-store purchase with respect employment status are 1.7656 and 1.7692 and corresponding standard deviation are 0.8469 and 1.00226. Therefore, the distribution is insignificant. There is no significant difference between employment status of the respondents with respective online and in-store purchase.

- The mean values for online and in-store purchase with respect annual household income are 3.1406 and 3.0000. The insignificant value (p= 0.789) which is insignificant at 5% level. Therefore, the distribution is insignificant. There is no significant difference between annual household income of the respondents with respective online and in-store purchase.
- The p-value is 0.465 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on availability of products at in-store.
- The p-value is 0.705 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on availability of products at online.
- The p-value is 0.175 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on exchange prices offered by online retailer for your old products.
- The p-value is 0.288 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on exchange prices offered by in-store retailer for your old products.
- The p-value is 0.411 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on hassle free payment with regard to online shopping.
- The p-value is 0.895 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the payment process of in-store shopping.
- The p-value is 0.325 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on replacement policy of online shopping.
- The p-value is 0.388 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the return product option in in-store shopping.
- The p-value is 0.797 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the products available in online are reliable.
- The p-value is 0.648 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the product available in-store are met your expectations.

- The p-value is 0.344 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the loyalty programs offered by online retailer.
- The p-value is 0.904 which is insignificant at 0.05. Therefore, there is no significant difference between age group of the respondents with respect to satisfaction level on the loyalty programs offered by in-store retailer.
- The p-value is 0.026 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the credit facility and pay later option influencing to buy product online.
- The p-value is 0.040 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the credit facility and pay later option influencing to buy product in-store.
- The p-value is 0.170 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on the online promotional programs influencing you to buy product online.
- The p-value is 0.089 which is significant at 0.05. Therefore, there is significant difference between age group of the respondents with respect to satisfaction level on in-store promotional programs influencing you to buy product.

Suggestions

- Enhance the usage of technology to strengthen the online shopping as it create more choices to the customers.
- Offer flexible and convenient online services that align with the lifestyle of consumers in SPSR Nellore.
- Engage with the local community through events, sponsorships, and collaborations. Actively seek and listen to consumer feedback, both online and offline.
- To promote both online and offline marketing need to strengthen the various types of local promotional strategies to gain the competitive advantage.
- Need to adapt the easy payment methods for both on-line and off line shopping.

Scope for Further Study

The scope of the future research can be conducted by developing a SEM with the help of moderation and mediation analysis. Further, the research can be conducted exclusively for online and off-line. The research can be further extended to have a comparative online and offline consumer behaviour between the states. The research can be conducted exclusively for different products like FMCG goods and Textile Products and Automobile products in the competitive era.

Conclusion

In conclusion, a thorough understanding of local tastes is essential for navigating SPSR Nellore's retail scene. Both in-store and online shopping experiences can be improved by a well-balanced combination of localized marketing, technological integration in-store, and an emphasis on promoting local items. Important tactics include providing adaptable online services that fit Nellore customers' lifestyles and actively participating in the community through events and feedback channels. Within the dynamic retail environment of SPSR Nellore, businesses may create enduring relationships and cultivate trust and loyalty by continually responding to changing customer trends and preferences.

References

Datta, D. D., & Roy, P. (2022). Determinants of Consumer Buying Behavior Towards Online and Offline Shopping. *Available at SSRN 4152228*.

Kim, Y., Wang, Q., & Roh, T. (2021). Do information and service quality affect perceived privacy protection, satisfaction, and loyalty? Evidence from a Chinese O2O-based mobile shopping application. *Telematics and Informatics*, *56*, 101483.

Muntaqheem, M., & Raiker, S. D. (2019). A study on consumer behavior towards online and offline shopping. *IRE Journals*, *3*(4), 56-62.

Nittala, R. (2015). Factors influencing online shopping behavior of urban consumers in India. *International Journal of Online Marketing (IJOM)*, *5*(1), 38-50.

Santhosh, V. (2022). A Study on Consumer Behaviour towards Online Shopping. IJRAR - *International Journal of Research and Analytical Reviews* (IJRAR), 9(1), 864-874.

Satyavani, B. (2020). Consumer Shopping Behaviour - An Empirical Study: (An Analysis with Reference to Select Areas of Andhra Pradesh).

Thorat, P. L. (2022). Study of Customer Satisfaction towards Online and Offline Shopping. *Journal of Positive School Psychology*, *6*(3), 7184-7193.

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 69-88

Leadership in Adverse Times: The Interplay of Adversity Quotient, Organizational Support, and Resilience in Academic Leadership During the COVID-19 Pandemic

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Introduction

Leaders who possess a high Adversity Quotient (AQ) demonstrate exceptional skills in effectively managing and overcoming problems; hence they are able to transform setbacks into favourable circumstances for personal and organizational development and fostering creativity (Green et al., 2019). Within the academic community, the capacity of faculty leaders to motivate teams of professors and students, make well-informed judgments in uncertain situations, and cultivate creativity highlights the importance of AQ in academic leadership.

The academic community has experienced significant uncertainty and adversity throughout the COVID-19 pandemic (Bozkurt et al., 2020). During the course of the pandemic, academic leaders had challenges related to their mental health (Wright et al., 2020) and resilience (Bryce et al., 2022). The effective management of challenges faced by academic faculty during the COVID-19 epidemic necessitated the implementation of a comprehensive and diverse strategy. The swift adjustment to online teaching required extensive training and assistance. Acknowledging the emotional toll, the prioritization of mental health resources and counseling services was implemented, alongside the provision of flexible work arrangements to accommodate a range of unique issues. In spite of the prompt actions taken by academic institutions in reaction to the virus, such as efficiently evacuating dormitories, training students and staff, and transitioning to

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online instruction, the implementation process has presented significant difficulties, with ongoing challenges persisting for many individuals (Hess, 2020). According to Sadler et al., (2020), the enhancement of faculty excellence is facilitated through professional development in the areas of online pedagogy and technology integration. The distribution of resources, encompassing technology and support personnel, was of utmost importance. The acknowledgment of faculty endeavours and the implementation of strategic measures to address uncertainty significantly enhanced morale.

Faculty members are considered academic leaders due to their multifaceted roles, which encompass their subject matter expertise, guidance of students, involvement in research and scholarly endeavours, and active participation in academic governance. Their impact goes beyond the confines of the educational setting, making significant contributions to the broader academic milieu and the progression of knowledge within their respective fields. The manner in which academic leaders deal with adversity is a significant area of concern, as the field of education must continuously adapt to unforeseen challenges and circumstances.

The realm of higher education is currently experiencing significant changes (Altbach et al., 2019), characterized by shifting demands, growing obstacles, and an ongoing commitment to achieving high standards. In the midst of intricate circumstances, individuals in positions of academic leadership arise as pivotal figures, tasked with guiding educational institutions towards achievement, cultivating resilience in the midst of challenges, and advocating for the welfare of the academic community (Gallos and Bolman, 2021). In light of the tremendous transformations and challenges faced by institutions, it is crucial to comprehensively examine the elements that impact the mental health, change management capacities, and psychological well-being of academic leaders. This endeavour is not only an academic quest but also a strategic need.

Academic Leaders and Adversity Quotient: Navigating the Labyrinth of Challenges

The first research question forms the bedrock of our inquiry, inviting us to delve into the intricate relationship between the AQ of academic leaders and key facets of their well-being. Academic leadership, by its very nature, is a challenging endeavour, demanding resilience, adaptability, and fortitude. This line of investigation seeks to unravel the extent to which an individual's ability to navigate the labyrinth of professional challenges impacts their mental health, proficiency in change management, and overall psychological well-being. By scrutinizing the AQ of academic leaders, we aim to illuminate the pathways through which their resilience contributes to their effectiveness in the complex terrain of higher education leadership.

Perceived Organizational Support: A Pillar of Well-Being in Academic Ecosystems

In the intricate landscape of higher education, academic leaders have faced unprecedented challenges, particularly during the tumultuous era of the COVID-19 pandemic. These leaders not only shape the trajectory of institutions but also play a vital role in fostering change and upholding the well-being of the academic community. Amidst these challenges, the present inquiry takes a closer look at the prevailing conditions, specifically examining how perceived organizational support influences the mental health, change management capabilities, and psychological well-being of academic leaders during the ongoing global health crisis. Institutions, functioning as the crucible for academic leaders, have taken on an even more pivotal role in shaping their professional identities and aspirations in the face of the pandemic. This study delves into the dynamics of support within institutions, encompassing elements such as recognition, appreciation, strategic planning, and resource allocation, to understand their profound impact on academic leaders navigating the complex terrain of higher education leadership, especially in the context of the unique challenges posed by the COVID-19 era. As we embark on this exploration, we aim to shed light on how institutional structures have influenced and continue to influence the well-being of academic leaders during these unprecedented times.

Resilience Dynamics: Interplay Between Individual Attributes and Organizational Support

The third research question forms the nexus of our exploration, as we endeavour to unravel the comparative impact of individual AQ and perceived organizational support on the resilience of academic leaders. This inquiry transcends the dichotomy between personal attributes and institutional support, seeking to understand the complex interplay between the individual's inherent resilience and the supportive scaffolding provided by the institution. Prayag et al. (2018) establish the significance of organizational resilience, highlighting that resilient companies make substantial contributions to the resilience of communities. According to existing literature, a significant portion of establishments that have demonstrated readiness to minimize the effects of COVID-19 have implemented and utilized an organizational resilience framework (Brown et al., 2021). Academics frequently engage with the concept of resilience, as evidenced by scholarly works such as those by Chen et al. (2021). Nevertheless, there is a lack of extensive research on the topic of organizational resilience in general, as highlighted by Bartusevičienė et al. (2021). By dissecting the elements that contribute to resilience, this study aims to explore whether personal attributes or institutional support mechanisms exert a more substantial influence on the ability of academic leaders to not merely weather storms but thrive amidst challenges.

Our research aspires to contribute not only to the scholarly discourse on academic leadership but also to offer practical insights that can inform leadership practices, institutional policies, and the broader mission of fostering thriving academic communities in an ever-evolving educational landscape. As we navigate the intersections of individual resilience, institutional support, and the diverse dimensions of well-being, the findings of this research seek to illuminate the path toward resilient, effective, and fulfilled academic leadership. Recognizing the multi-faceted nature of their roles, this research endeavours to unravel the intricate dynamics that link the AQ of academic leaders, perceived organizational support, and crucial dimensions of their well-being.

Studying the interplay between the AQ of academic leaders, perceived organizational support, and dimensions of well-being in higher education is essential for a multitude of reasons. It provides a better understanding of how academic leaders respond to challenges, enabling the tailoring of professional development initiatives to enhance leadership effectiveness. Moreover, it sheds light on the mental health and well-being of academic leaders, informing interventions that create supportive work environments. Insights into perceived organizational support contribute to refining institutional policies and support structures. This knowledge can shape leadership development programs, aligning content with identified needs and stressors, and ultimately fostering resilient and adaptive leaders. The study also strengthens institutional resilience by anticipating challenges and fortifying organizational fabric. Beyond practical implications, this research enriches the scholarship on academic leadership, offering valuable insights for researchers, policymakers, and practitioners invested in advancing effective leadership within the distinctive context of higher education. In essence, this study is not just an academic pursuit; it is a strategic imperative for fortifying leadership, fostering well-being, and cultivating a resilient higher education sector capable of meeting the challenges of today and the future. With this background, the current paper attempts to explore:

- How does the AQ of academic leaders relate to their mental health, change management, and psychological well-being?
- How does perceived organizational support (recognition, appreciation, strategic planning, and resource allocation) by institutions relate to mental health, change management, psychological well-being of academic leaders?
- What impacts resilience more? Individual AQ or perceived organizational support?

Conceptual Framework

Relation between AQ and Mental Health

The complex relationship between mental health and the AQ reflects the dynamic interaction between a person's capacity for problem-solving and their general psychological well-being. Adversity is a difficult situation or event that brings challenges to the lives of people. The reaction of individuals toward adversity determines whether it will bring disappointment, sadness, despair, and hopelessness or happiness, growth, and success for them (Singh and Sharma, 2017). AQ and mental health have a complex link that reflects the dynamic interaction between a person's capacity for overcoming obstacles and their general psychological well-being. During the COVID-19 outbreak, a population-based survey showed post-crisis mental health problems among students (Cao et al., 2020). People with higher AQ frequently demonstrate improved coping strategies, more proficiency in managing stress, and an increased ability to solve problems. These qualities help them face and overcome obstacles in life, which has a favourable impact on their mental health. AQ also plays a very important role in one's life. Students face a lot of situations or challenges in their daily lives. To overcome or to face these problems, AQ is required. A person who has the capacity to face and overcome adversities can attain his/her goals in life easily. A person should have the ability to respond to a particular adversity situation in an amicable way. This ability is essential for student teachers to solve their day-to-day problems (Parvathy and Praseeda, 2014). Developing a high AQ can help create a positive feedback loop in which mental health is nourished by coping mechanisms and resilience, and mental health in turn increases an individual's ability to confront and overcome adversity. The correlation between AQ and mental health has been acknowledged, underscoring the significance of developing resilience and adaptability in an all-encompassing strategy for psychological well-being. A study conducted by Jie and Zhi-Wen, (2009) shows that AQ and the self-supervision ability of freshmen relate to their studying qualities and mental health. The AQ, a measure of adaptability and resilience in the face of challenges, is closely related to outcomes related to mental health. Thus, we hypothesize that:

H1: There is a Positive relationship between Adversity Quotient and Mental Health

Relation between and AQ and Change Management

Resiliency is also defined as a positive adaptation and is considered as a demonstration of manifested behavior of social competence or success at meeting any particular task at a specific life stage (Luthar & Cicchetti, 2000). People with a high AQ are more resilient to uncertainty because change frequently generates uncertainty. They are more prepared to deal with obstacles and disappointments that could occur throughout the process of change. This resilience enables people to remain positive and focused in the face of resistance or unforeseen difficulties. Resilience as adapted to the workplace has been defined as the positive psychological capacity to rebound, to bounce back from adversity, uncertainty, conflict, failure, or even positive change, progress, and increased responsibility (Luthans, 2002). People with high AQ are less likely to be resistant to change. They are less wedded to the status quo and more receptive to new methods of functioning because of their adaptability and optimistic outlook. Because of this decreased opposition, change projects can be implemented more successfully and smoothly. Thus, we hypothesize that:

H2: There is a Positive relationship between Adversity Quotient and Change Management.

Relation between Adversity Quotient and Psychological Well-Being

The AQ and well-being are closely related since a high AQ greatly enhances people's general psychological and emotional well-being. AQ, which stands for the ability to successfully traverse and overcome adversity, is intimately related to a number of variables that affect well-being. The higher the AQ they have, the higher their psychological well-being (Dewi et al., 2021). The results of research conducted by Chadha (2021) show that the AQ affects an individual's psychological well-being. The ability of an individual AQ that is very helpful in dealing with problems will affect the steps taken by individuals for problem-solving and stress coping (Chadha, 2021). It will affect the individual's level of psychological well-being. The results of this study are relevant, where there is a significant positive relationship between psychological well-being and the adversity quotient. Psychological well-being certainly has a relationship with the AQ so that the difficulties encountered can be resolved and the life goals of fresh graduates in looking for work can be achieved. This dimension helps individuals to create an environmental condition that supports their psychological well-being. A high AQ gives people the resources they need to prosper in the face of hardship, encouraging resilience as well as constructive thinking and useful coping strategies that are the cornerstones of an all-encompassing sense of well-being. Thus, we hypothesize that:

H3: There is a Positive relationship between Adversity Quotient and Psychological Wellbeing.

Relation between Perceived Organizational Support and Mental Health

Global teaching and learning techniques have changed as a result of the COVID-19 epidemic, including the shift from onsite to online instruction. These changes triggered by the COVID-19 pandemic have brought about a number of changes that have caught educators off guard and presented difficulties for both instructors and students As a result, there are growing worries about mental health among teachers as they struggle with growing workloads and uncertainty. Therefore, the connection between Perceived Organisational Support (POS) and Mental Health in Academic Leadership roles is very important to maintain the well-being and mental health of the faculty and academic leaders Additionally, organization administrators can enhance happiness at work by creating a positive work environment and allocating jobs to faculty and leaders based on their qualifications and interests at a suitable workload level. The following managerial takeaway has to do with job satisfaction. Perceived Organizational Support was shown to be a reliable indicator of job satisfaction and good mental health. (Sudibjo and Manihuruk, 2022). The academic administrations ought to give the faculty and leaders more broad support. Because, perceived organizational support was found to be a strong predictor of good mental health and job satisfaction; (Sudibjo and Manihuruk, 2022). Therefore, academic leaders should increase the general support provided to faculty, and the administration should adequately attend to faculties complaints and concerns, provide support for remote learning (e.g., internet quotas and training), assist the ones who are sick, particularly during the COVID-19 pandemic, and show meaningful appreciation for their contributions (Sudibjo and Manihuruk, 2022). Thus, we hypothesize that:

H4: There is a Positive relationship between Perceived Organizational Support (POS) and Mental Health.

Relation between Perceived Organizational Support and Change Management

One of the key elements of a successful college experience is the faculty's willingness to adapt and change with the times. This is especially true during the COVID-19 pandemic. (Taufikin et al.,2021) Instructors with high levels of self-efficacy and perceived organizational support will prepare themselves for any kind of change. Preparing an organization for change involves making changes that will come before resistance. Aside from that, there is a strong correlation between organizational changes and members' preparedness. This conduct will have an impact on how the administration, faculty, and staff behave. As a result, resistance to change is directly impacted negatively by preparedness for change. (Jabbarian & Chegini, 2017; Ming-Chu & Meng-Hsiu, 2015). It is expected for lecturers to understand more about the purpose of changes so that they will receive the same changes that occur in the future. According to (Rhoades & Eisenberger, 2002), perceived organizational support can be divided into five sub-dimensions carefully noticed by academic leaders and organizations across the globe, which consist of: (1) Faculty's welfare, (2) Faculty's purpose, (3) Faculty contribution, (4) Faculty's self-development, and (5) reward for Faculty's effort. Perceived organizational support and self-efficacy have a significant positive influence on the readiness for change on academic organizations across the globe. Other than that, self-efficacy also has a significant positive influence on readiness for change and it also could have a role as a mediator between the relationship of perceived organizational support and readiness for change. (Armenakis et al.,1993). Thus, we hypothesize that:

H5: There is a Positive relationship between Perceived Organizational Support (POS) and Change Management.

Relation between Perceived Organizational Support and Psychological Well-Being

For many years now, psychological health has grown to be crucial to the teaching profession. The stressful nature of the teaching profession is partly caused by the working conditions that educators must endure, and it is also influenced by the consequences of the COVID-19 pandemic (Feni, 2022). (Wang et al., 2020) Initiatives and perspectives from both the organization and the individual significantly contribute to the psychological health of employees. One of the resource areas that employees aim for is organizational support. A range of actions and resources are available to organizations through perceived organizational support, which gives workers the assistance they require for long-term positive results. The increasing prevalence of positive psychology underscores the need for organizations to comprehend the impact of organizational factors on the psychological well-being of their workforce in order to enhance productivity and performance. The increasing prevalence of positive psychology underscores the need for organizations to comprehend the impact of organizational factors on the psychological well-being of their workforce in order to enhance productivity and performance. (Wang et al., 2020).

Workers in a supportive environment are aware of the resources available to them, and this motivates them to become involved in the organization. This interaction fosters a positive and healthy work environment where employees feel valued and empowered to make decisions on their own (autonomy), select workspaces that suit their preferences, and take advantage of opportunities to overcome obstacles in the workplace (environmental mastery). All of these factors contribute to the psychological well-being of staff members. (Boers, 2014) Thus, we hypothesize that:

H6: There is a Positive relationship between Perceived Organizational Support (POS) and Psychological Wellbeing (PW).

Adversity Quotient and Resilience

AQ and resilience have a symbiotic relationship that forms a dynamic interaction that moulds an individual's ability to navigate and overcome obstacles. AQ is inextricably tied to the fundamental components of resilience, as it symbolises the capacity to face adversity with flexibility and resilience. Resilience and AQ, superficially, seem to measure one's ability to deal with tough situations. AQ can predict the resilience and persistence of a person and can be used to enhance the effectiveness of teams, relationships, families, communities, cultures, societies and organizations (Phoolka and Kaur 2012). People who have a high AQ tackle problems with a perspective that views setbacks as transitory setbacks that are beneficial for personal development. This lack of anxiety in the face of failure helps people cultivate a resilient mindset, in which failures are seen as necessary stages on the path to success Langvardt (2007) examined the relationship of resilience and commitment to change during a time of organizational transformation. A person with good resilience has the ability to bounce back more quickly and with less stress than someone whose resilience is less developed (Cohen, 2017). The empowerment that comes with resilience is directly related to the sense of control over one's situation that is developed by AQ. People who are resilient have faith in their capacity to shape events and take proactive measures to overcome obstacles, which enhances their general well-being and resilience sounds similar but they have a different meaning (Chunin et al., 2018). Resilience and AQ essentially have a mutually supportive connection. The mentality, abilities, and emotional intelligence required for resilience are provided by AQ, and resilience in turn enhances a person's ability to face and overcome adversity. The significance of developing both AQ and resilience as complementing aspects of a person's capacity to flourish in the face of life's uncertainties and challenges is highlighted by this interconnection. Thus, we hypothesize that:

Perceived Organizational Support and Resilience

Several academic administrators and institutions have found it difficult to respond appropriately and swiftly to the COVID-19 pandemic with resilience as it spread quickly around the world. A community, group, or individual's universal ability to fend off, lessen, and ultimately triumph over the negative consequences of adversity is known as resilience. (Grotberg, 1995) Among the most significant societal institutions impacted by the pandemic were academic institutions (McLeod and Dulsky, 2021). Resilience is therefore crucial because it has to do with a person's capacity to overcome hardship, grow from misfortune, and overcome obstacles in life

(Grotberg, 1995). Academic leaders and institutions with high resilience had more experiences with supportive organization environments and resilience-boosting elements, whereas academic leaders and institutions with low resilience, on the other hand, encountered fewer organisational support systems but more threats to their resilience, particularly from leaders who were not supportive, from feeling invisible to the public, from having poor relationships with their colleagues, and from adopting a fixed mindset. Hence, educators/leaders who encounter greater organizational support and resilience-promoting factors, particularly those with strong relationships, encouraging leaders, and an optimistic outlook, have been well-positioned to succeed in online as well as offline classrooms, especially during times like COVID-19 (Journell, 2023). Thus, we hypothesize that:

Method

Research Design

This study adopts a comprehensive research approach employing a mixed-methods design to investigate the interplay between the AQ of academic leaders in higher education institutions in India and its relationship with mental health, change management, and psychological well-being. The research design integrates quantitative data obtained through structured surveys and qualitative insights gathered via semi-structured interviews. The data triangulation approach ensures a better understanding of the variables under investigation. Quantitative data collection is facilitated through a structured questionnaire survey, enabling the exploration of the adversity quotient, mental health indicators, change management perceptions, and psychological well-being among academic leaders. Concurrently, semi-structured interviews are conducted to delve deeper into the subjective experiences and perceptions of academic leaders, providing rich qualitative data that complement the quantitative findings.

Sample Surveyed

The study's sample comprises academic leaders in higher education institutions across India, selected through a purposive sampling strategy. A total of 220 academic leaders participated in the study, ensuring a representative mix of genders, age groups, and institutional roles. The sample distribution includes 60% males and 40% females, with an age range spanning from 35 to 60 years. Participants are drawn from various academic disciplines and diverse geographical regions in India, promoting a broad representation. Sampling procedures involve a combination of random sampling and snowball sampling techniques to capture a diverse range of academic leaders. Stratification is applied based on institutional roles, encompassing deans, department heads, and other leadership positions. The educational qualifications of participants range from postgraduate degrees to doctorates. To be eligible for participation, academic leaders must have a minimum of five years of experience in their leadership roles within higher education institutions. This criterion ensures that participants possess substantial experience and insights relevant to the study's focus. The inclusion criteria also consider individuals with varying levels of perceived organizational support and resilience**.**

Questionnaires Used

The research instrument employs a meticulously developed questionnaire consisting of validated scales to measure the variables derived from the research questions. The scales include the Adversity Quotient Scale (AQS) to assess the adversity quotient, the Mental Health Inventory (MHI) for mental health indicators, the Change Management Perception Scale (CMPS) for evaluating change management perceptions, and the Psychological Well-Being Scale (PWBS) for psychological well-being assessment. The questionnaire is designed to capture perceptions of perceived organizational support, encompassing recognition, appreciation, strategic planning, and resource allocation. Resilience data was collected through the questionnaire as outlined in the Brief Resilience Scale (Smith et al., 2008). Open-ended questions within the survey facilitate the collection of qualitative insights, allowing academic leaders to elaborate on their experiences. To mitigate Common Method Bias and other potential questionnaire method biases, this study implemented several measures at various stages of the research process. First, the order of questions in the questionnaire was randomized to minimize order bias. This approach ensured that participants did not develop a systematic response pattern based on the sequence of the questions. Additionally, data collection was conducted in two distinct phases with a significant gap between them, allowing for a temporal separation. A 30-day gap between phases minimized response bias. This temporal gap minimized response bias and reduced the likelihood of participants recalling their previous responses and providing consistent answers. The design of the questionnaire itself was carefully constructed to minimize bias, with attention given to the clarity and wording of the items. By using validated scales and adapting items from established measures, the study aimed to enhance the reliability and validity of the responses. These precautions collectively contributed to minimizing common method bias and other potential biases throughout the research process.

Data Analysis

Quantitative data analysis involves descriptive statistics, correlation analyses, and regression analyses to explore the relationships between the adversity quotient, perceived organizational support, and the outcomes related to mental health, change management, and psychological well-being. Qualitative data from the interviews are analyzed thematically to extract nuanced insights and contextual understanding. By combining both quantitative and qualitative methodologies, this study aims to provide a holistic exploration of the interconnections between the adversity quotient, perceived organizational support, and the well-being of academic leaders in higher education institutions in India. Thus, using a data triangulation approach the study explored the individual factor (AQ) and institutional factors on academic leaders' mental health, change management, psychological well-being and finally their impact on resilience during turbulent times. Ethical considerations, such as informed consent and confidentiality, were prioritized, and the study aimed to provide practical insights with implications for academic leadership and future research.

Results and Discussion

For addressing research question 1, we employed Spearman's correlation to examine the linear relationship between AQ and mental health, change management, and psychological well-being. We are looking at these research questions in the form of three hypotheses, viz.,

H1: There is a Positive relationship between Adversity Quotient and Mental Health

H2: There is a Positive relationship between Adversity Quotient and Change Management

H3: There is a Positive relationship between Adversity Quotient and Psychological Wellbeing

H1: Positive relationship between Adversity Quotient and Mental Health

Spearman's correlation analysis revealed a significant positive relationship between AQ and Mental Health ($r = 0.65$, $p < 0.001$). This indicates that a higher AQ is associated with better Mental Health among academic faculty during challenging situations, such as the COVID-19 pandemic. This finding suggests that as the AQ increases, there is a corresponding improvement in the Mental Health of academic faculty members. In other words, leaders with high AQ tend to exhibit better mental well-being in the face of challenging circumstances, such as those encountered during the unprecedented events of the COVID-19 pandemic. The robust positive correlation emphasizes the potential protective role of a well-developed AQ in buffering the impact of adversities on the mental health of academic faculty. This aligns with existing literature that underscores the importance of AQ towards better mental health. For instance, faculty members who can effectively navigate uncertainties and disruptions, traits encapsulated in a higher Adversity Quotient, are likely to experience fewer negative consequences on their mental health during times of crisis. Institutions and policymakers may consider implementing interventions aimed at enhancing the AQ of faculty members as a strategy to promote and safeguard their mental health in the face of ongoing uncertainties and disruptions in the academic landscape.

H2: Positive relationship between Adversity Quotient and Change Management

Spearman's correlation analysis demonstrated a significant positive relationship between AQ and Change Management ($r = 0.50$, $p < 0.001$). This suggests that academic faculty with a higher AQ exhibit more effective Change Management skills, crucial for adapting to unforeseen circumstances like those experienced during the pandemic. In the context of the COVID-19 pandemic, where universities faced unprecedented challenges and required adaptive responses, faculty members with a greater ability to navigate and manage change were better equipped to address the demands of remote learning, shifting academic priorities, and other unforeseen circumstances. This finding posits the importance of AQ in facilitating effective responses to organizational changes.

H3: Positive relationship between Adversity Quotient and Psychological Wellbeing

Spearman's correlation analysis indicated a significant positive relationship between AQ and Psychological Well-Being ($r = 0.60$, $p < 0.001$). This implies that a higher AQ is linked to enhanced PWB among academic faculty. This finding is particularly relevant in the context of the COVID-19 pandemic, where faculty members faced heightened stressors, including changes in work routines, increased workload, and uncertainties. Faculty members with higher Adversity Quotients likely exhibited better coping mechanisms, contributing to their PWB.

For addressing research question 2, we employed Spearman's correlation to examine the linear relationship between POS and mental health, change management, and psychological well-being. We are looking at these research questions in the form of three hypotheses, viz.,

H4: There is a Positive relationship between Perceived Organizational Support (POS) and Mental Health.

H5: There is a Positive relationship between Perceived Organizational Support (POS) and Change Management (CM).

H6: There is a Positive relationship between Perceived Organizational Support (POS) and Psychological well-being (PW).

H4: Positive relationship between Perceived Organizational Support (POS) and Mental Health.

Spearman's correlation analysis showed a significant positive relationship between POS and Mental Health ($r = 0.55$, $p < 0.001$). This suggests that higher levels of perceived support from the organization are associated with better Mental Health among academic faculty, particularly relevant in times of the COVID-19 pandemic when the entire academic world saw drastic changes in terms of knowledge dissemination as well as administration of academic institutions. The observed positive relationship indicates that higher levels of POS are associated with better Mental Health among academic faculty. In the context of the COVID-19 pandemic, where uncertainties and disruptions were prevalent, faculty members who perceived strong support from their organizations had better mental health and coped better with the stress of uncertainty. This result emphasizes the role of organizational support as a crucial factor in maintaining the well-being of academic faculty, especially during challenging times.

H5: Positive relationship between POS (POS) and Change Management

Spearman's correlation analysis revealed a significant positive relationship between POS and Change Management ($r = 0.45$, $p < 0.001$). This indicates that academic faculty who perceive strong organizational support are more adept at effective Change Management, crucial for responding to uncertainties. This is particularly important in the face of uncertainties and changes, such as those experienced during the COVID-19 pandemic.

H6: Positive relationship between POS and Psychological Well-being

Spearman's correlation analysis demonstrated a significant positive relationship between POS and Psychological Well-being ($r = 0.58$, $p < 0.001$). This implies that higher POS is associated with improved Psychological Well-being among academic faculty, contributing to their overall resilience.

The individual contribution of AQ to resilience was statistically significant ($\beta = 0.45$, $p < 0.001$), suggesting that higher AQ is associated with increased resilience. Similarly, Perceived Organizational Support also significantly predicted resilience ($\beta = 0.50$, $p < 0.001$), indicating that higher perceived support from the organization contributes positively to the resilience of academic faculty. The findings from the hierarchical regression analysis provided significant insights into the determinants that impact the level of resilience observed among academic faculty members. The findings of the study revealed that there was a significant and noteworthy association between an individual's AQ and their level of resilience ($\beta = 0.45$, $p < 0.001$). This suggests that a greater AQ is positively correlated with an enhanced capacity for resilience. This discovery implies that academic faculty members who have higher levels of resilience possess more skills in effectively navigating and surmounting difficult circumstances. Resilience is a constructive psychological construct that emphasizes the capacities and virtues of both organizations and individuals to effectively navigate and manage crises (Ojo et al., 2021). Earlier studies also found that this attribute has particular significance in the context of the ongoing pandemic (Plomecka et al., 2020). Furthermore, the research investigation revealed that the variable of Perceived Organizational Support (POS) played a significant and influential role in the prediction of resilience, as indicated by the beta coefficient of 0.50 ($p < 0.001$). This suggests that academic faculty members who experience a higher degree of support from their respective organizations are more likely to exhibit increased levels of resilience. The interplay between an individual's AQ and Perceived Organizational Support in relation to resilience highlights the complex array of elements that contribute to the capacity of academic faculty members to effectively recover from challenging circumstances. The findings of this study are consistent with previous scholarly works that highlight the significance of both personal attributes and organizational assistance in promoting resilience among professionals. These results provide valuable insights for institutions seeking to improve the overall welfare of their academic personnel.

The COVID-19 pandemic posed unprecedented challenges for academic leaders, requiring adaptive responses and resilience. Academic leaders with higher individual adversity quotients were found to be more resilient, highlighting the importance of personal resilience in navigating crises. The significance of recognition and strategic planning from the organizational standpoint suggests that institutions can enhance leaders' resilience by acknowledging their efforts and involving them in strategic decision-making processes.

Practical Implications

The implications of the research findings on the AQ of academic leaders on mental health, change management abilities, and psychological well-being have practical significance for academics and practitioners in this domain. It should also encompass individuals involved in academic policy-making. To cultivate resilient leadership, organizations have the opportunity to establish comprehensive leadership development programs that especially concentrate on augmenting leaders' adversity quotient. Workshops and training sessions can be specifically tailored to provide academic leaders with the requisite abilities and techniques to adeptly navigate problems in their respective roles. In light of the strong association between personal resilience and mental well-being, it is advisable for institutions to incorporate modules focused on stress management, emotional intelligence, and coping strategies into their leadership training programs. To cultivate a conducive work environment, institutions have the capacity to implement organizational support initiatives. This entails the active recognition of academic leaders' efforts through the implementation of recognition programs, which have the potential to exert a positive impact on leaders' mental well-being and job satisfaction. In order to enhance the effectiveness of strategic planning activities, it is imperative to incorporate the participation of academic leaders in decision-making processes, thereby affording them a sense of autonomy and engagement. The adoption of this inclusive approach has the potential to exert a substantial influence on the psychological well-being of leaders. In light of the observed positive correlation between AQ and mental health, it is recommended that institutions allocate resources towards the implementation of mental health initiatives. This may encompass the provision of counseling services, resources for stress management, and initiatives aimed at promoting mental health awareness, all of which are intended to bolster the well-being of academic leaders. By comprehending the correlation between AQ and change management capabilities, organizations have the opportunity to implement change management tactics that are congruent with the strengths of their leaders. Enhancing the effectiveness of managing transitions can be achieved through the implementation of effective communication strategies, comprehensive training programs, and active involvement of leaders in the planning and execution processes.

The significance of perceived organizational support has been underscored by empirical investigations. It is recommended that institutions implement performance recognition mechanisms, such as rewards, public acknowledgement, and platforms for leaders to demonstrate their accomplishments. This factor contributes to fostering a positive work environment and enhancing employee motivation. Moreover, in acknowledging the influence of perceived recognition on resilience, educational institutions have the ability to adopt adaptable work regulations as a means to mitigate the pressures experienced by academic leaders, particularly in times of crisis like as the ongoing COVID-19 pandemic. This entails providing employees with the opportunity to have flexible work hours or the ability to work remotely, which can assist to the enhancement of work-life balance and the promotion of higher mental well-being.

In order to cultivate a culture of resilience inside educational institutions, it is imperative for these organizations to establish a conducive work atmosphere, stimulate collaborative efforts, and offer ample tools for professional growth. The use of continuous monitoring mechanisms, such as regular feedback sessions, surveys, and open communication channels, is vital in order to comprehensively comprehend the dynamic requirements of academic leaders and subsequently customize support measures. Through the implementation of these pragmatic measures, educational institutions have the potential to make significant contributions to the general welfare and efficacy of academic leaders. This, in turn, ensures that these leaders are more adequately prepared to successfully navigate various problems and make beneficial contributions to the educational milieu.

Conclusion

The utilization of multiple regression analysis will facilitate a comprehensive comprehension of the distinct contributions made by several dimensions of AQ and perceived organizational support towards the mental health, change management, and psychological well-being of academic leaders. By incorporating relevant research findings, the discourse can yield more extensive observations regarding the significance of organizational support for leaders, thereby offering a holistic perspective on the factors that impact their well-being and efficacy, particularly during periods of unparalleled difficulties such as the COVID-19 pandemic. Resilient leaders has the ability to assume a pivotal function amidst crises, such as the ongoing COVID-19 pandemic, through their capacity to adjust to evolving circumstances, provide assistance to their teams, and uphold their personal welfare. Organizations may contemplate the cultivation and augmentation of AQ in academic leaders as a strategic approach to bolster their general aptitude in effectively managing challenges. The study findings indicate that while individual resilience, as measured by the AQ, is an important factor, the study demonstrates that POS has a greater influence on resilience ($\beta = 0.50$, $p < 0.001$). This implies that academic institutions have the potential to cultivate resilience among their faculty members by placing importance on and improving the supportive elements of the organizational setting. Acknowledging the significance of positive organizational support (POS) and adopting measures to foster a supportive culture within academic environments can greatly enhance the welfare and adaptability of faculty members, hence fostering a more resilient and prosperous academic community.

References

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). *Trends in global higher education: Tracking an academic revolution*, *22*. Brill.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, *46*(6), 681-703. doi:10.1177/001872679304600601

Bartusevičienė, I., Pazaver, A., & Kitada, M. (2021). Building a resilient university: Ensuring academic continuity – Transition from face-to-face to online in the COVID-19 pandemic. *WMU Journal of Maritime Affairs*, *20*(2), 151-172. doi:10.1007/s13437-021-00239-x

Boers, M. (2014). *Empirical evaluation of the Stein-Boers structural model of psychological well-being at work*. Stellenbosch, Western Cape, South Africa: University of Stellenbosch.

Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G.,... & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, *15*(1), 1-126.

Brown, S., Finn, P., Mysore, M., & Usher, O. (2021). *'In conversation: Managing in extreme uncertainty', Podcast*, June 15.

Bryce, C., Ring, P., Ashby, S., & Wardman, J. K. (2022). Resilience in the face of uncertainty: Early lessons from the COVID-19 pandemic. In *COVID-19*. Routledge, (48-55).

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, *287*, 112934. doi:10.1016/j.psychres.2020.112934

Chadha, D. N. (2021). 'Adversity quotient: Surviving rather than giving up,' Psychol. *Psychology and Education Journal*, *58*(2), 5942-5947. doi:10.17762/pae.v58i2.3068

Chen, R., Xie, Y., & Liu, Y. (2021). Defining, conceptualizing, and measuring organizational resilience: A multiple case study. *Sustainability*, *13*(5), 2517. doi:10.3390/su13052517

Chunin, M., Petchprayoon, C., & Khongngam, S. (2018). *Adversity quotient and resiliency predicting career success of teachers in secondary schools*. *Assoc. Priv*. High, & Educ. Institute. Thail. Under patronage her R. *Highness Princess Maha Chakri Siridhorn*, *7*(2), 49-62.

Cohen, H. (2017). What is resilience? Retrieved from https://psychcentral.com/lib/what-isresilience/

Dewi, D. K., Wijaya, P. N., & Puteri, A. P. (2021, December). The relationship between psychological well-being and adversity quotient on fresh graduates during COVID-19. In. *Advances in Social Science, Education and Humanities Research* International Joint Conference on Arts and Humanities. Atlantis Press, 2021, (1076-1080). doi:10.2991/assehr.k.211223.189 (*IJCAH*. 2021).

Feni, N. K. Y. (2022). *The effect of perceived organizational support and psychological capital on the psychological well-being of teachers* ([Doctoral Dissertation]. University of the Free State).

Gallos, J. V., & Bolman, L. G. (2021). *Reframing academic leadership*. Chichester, UK: John Wiley & Sons.

Green, W. S. M., & Leonard, E. E. (2019). *The soft skills of leadership: Navigating with confidence and humility*. Rowman & Littlefield Publishing Group Publishers.

Grotberg, E. H. (1995). *A Guide to Promoting Resilience in Children: Strengthening the Human Spirit= Guia de Promocion de la Resiliencia en Los Ninos para fortalecer el Espiritu Humano*.

Hess, A. J. (2020). 7 ways the coronavirus pandemic could change college this fall and forever. *Financial Times*, June 19.

Jabbarian, J., & Chegini, M. G. (2017). The effect of perceived organizational support on employee resistance to change: A study on Guilan municipal staff. *Journal of History Culture and Art Research*, *5*(4), 642-654. doi:10.7596/taksad.v5i4.627

Jie, A., & Zhi-Wen, D. (2009). Wu Li-cun. *On the adversity quotient of freshmen and tactics of setback education*. Retrieved from http://en.cnki.com.cn/

Langvardt, G. D. (2007). *Resilience and commitment to change: A case study of a nonprofit organization*. Capella University.

Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, *23*(6), 695-706. doi:10.1002/job.165

Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology*, 12(4), 857-885. doi:10.1017/s0954579400004156

McLeod, S., & Dulsky, S. (2021). Resilience, reorientation, and reinvention: School leadership during the early months of the COVID-19 pandemic. In *Frontiers in Education*, 6, (70). doi:10.3389/feduc.2021.637075

Ming-Chu, Y., & Meng-Hsiu, L. (2015). Unlocking the black box: Exploring the link between perceive organizational support and resistance to change. *Asia Pacific Management Review*, *20*(3), 177-183. doi:10.1016/j.apmrv.2014.10.003

Ojo, A. O., Fawehinmi, O., & Yusliza, M. Y. (2021). Examining the predictors of resilience and work engagement during the COVID-19 pandemic. *Sustainability*, *13*(5), 2902. doi:10.3390/su13052902

Parvathy, U., & Praseeda, M. (2014). Relationship between adversity quotient and academic problems among student teachers. *Journal of Humanities and Social Sciences*, *19*(11), 23-26.

Phoolka, E. S., & Kaur, N. (2012). Adversity Quotient: A new paradigm to explore. *Contemporary Business Studies*, *3*(4), 67-78.

Płomecka, M. B., Gobbi, S., Neckels, R., Radziński, P., Skórko, B., Lazzeri, S.,... & Jawaid, A. (2020). Mental Health Impact of COVID-19: A global study of risk and resilience factors. *MedRxiv*, 2020-2005.

Prayag, G., Chowdhury, M., Spector, S., & Orchiston, C. (2018). Organizational resilience and financial performance. *Annals of Tourism Research*, *73*, 193-196. doi:10.1016/j.annals.2018.06.006

Sadler, T. D., Friedrichsen, P., Zangori, L., & Ke, L. (2020). Technology-supported professional development for collaborative design of COVID-19 instructional materials. *Journal of Technology and Teacher Education*, *28*(2), 171-177.

Singh, S., & Sharma, T. (2017). Affect of adversity quotient on the occupational stress of IT managers in India. *Procedia Computer Science*, *122*, 86-93. doi:10.1016/j.procs.2017.11.345

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194-200. doi:10.1080/10705500802222972

Wang, X., Guchait, P., & Pasamehtoglu, A. (2020). Why should errors be tolerated? Perceived organisational support, organisation-based self esteem and psychological well-being. *International Journal of Contemporary Hospitality Management*, 1987-2006.

Wright, L., Steptoe, A., & Fancourt, D. (2020). How are adversities during COVID-19 affecting mental health? Differential associations for worries and experiences and implications for policy. *MedRxiv*, 2020-2005.

Sudibjo, N., & Manihuruk, A. M. (2022). How do happiness at work and perceived organizational support affect teachers' mental health through job satisfaction during the COVID-19 pandemic?. *Psychology Research and Behavior Management*, 939-951.

Taufikin, I. A. I. N., Zamroni, S., & Muthohar, A. (2021). Readiness to change during the covid-19 pandemic: Study of self-efficacy and perceived organizational support on lectures performance. *Academy of Strategic Management Journal*, *20*(45).

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of applied psychology*, *87*(4), 698.

Journell, L. (2023). *The Relationships Among Organizational Support, Teacher Well-being, and Teacher Resilience in Secondary School Teachers* (Doctoral dissertation, Wright State University).

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 89-101

Leadership in Adversity: Navigating Challenges and Fostering Resilience in Organizational Contexts

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Abstract

This article examines the transferring nature of leadership in the face of adversity, shedding light on the myriad of demanding situations that leaders should overcome and the procedures they employ to navigate tumultuous environments. In the modern world, which is constantly moving, groups are constantly positioned within the position of having to address unanticipated crises. These crises can range from monetary downturns and worldwide pandemics to geopolitical tensions. The ability to offer study leadership in the face of challenging occasions is now definitely important for the ongoing existence and enlargement of agencies.

This have a look at investigates the theoretical underpinnings of powerful leadership in difficult environments, drawing from nicely-established models and theories which include transformational leadership, adaptive management, and resilience theory. This paper takes a important observe how leaders can leverage those frameworks to foster organizational resilience, which no longer only promotes a corporation's capacity to undergo tough times but also its capability for innovation and expansion.

The research investigates a extensive variety of commercial enterprise sectors and settings with a purpose to become aware of leadership practices which can be similar to each other in addition to those which can be particular. Case research shed light on how crucial it's miles to exercise bendy selection-making, cultivate sturdy communication skills, and construct resilient organizational cultures.

The take a look at also investigates how powerful management in hard instances could have a effective impact at the health and productiveness of people working in companies. This study investigates the role that

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leaders play in imparting employees with emotional aid, fostering a sense of community, and mitigating the poor consequences that strain and uncertainty could have on people.

In end, this paper offers a holistic angle that integrates theoretical insights with practical implications. It does so through synthesizing the contemporary knowledge of leadership in tough circumstances and imparting a synthesis of this expertise. This highlights the importance of management traits together with agility, resilience, and the ability to inspire collective action in companies as they navigate the instances of turbulence. In the end, powerful leadership in times of adversity is not virtually a reaction to the obstacles that rise up; as a substitute, it is a proactive and transformative pressure that shapes the destiny path that companies will soak up a international this is unsure.

Keywords: Adversity, Leadership, Organizational Challenges, Resilience

Introduction

Organizations confront a wide variety of difficulties in the rapid-paced, uncertain enterprise global of today, which may also jeopardize their long-term viability, enlargement, and stability. These difficulties may also arise from outside resources like economic downturns, technological disruptions, and regulatory adjustments, or from inner ones like organizational inefficiencies, leadership mistakes, and strategic mistakes. These difficulties, regardless of which they come from, can put a corporation's resilience to the check its ability to endure hassle, modify, and move on.

The aim of organizational resilience is to thrive in the face of uncertainty and exchange, no longer just to get via crises. Key developments of resilient businesses include the following:

Anticipatory: They are capable of understanding and examining feasible risks and opportunities before others do, which offers them the benefit of being able to act proactively to reduce risks and capture new possibilities.

Adaptable: They can adjust their plans, corporation systems, and operational processes in reaction to evolving situations, making certain their endured relevance and competitiveness.

Collaborative: They sell a climate of cooperation, verbal exchange, and mutual aid, which permits them to pool sources, exchange expertise, and work together to overcome demanding situations.

Learning: They welcome lifelong knowledge of and improvement, viewing limitations and screw-ups as chances to hone their talents and carry out higher.

Developing resilience requires an all-encompassing method that takes into account the employer's strategies, systems, procedures, management, and tradition. Organizations can successfully navigate demanding situations, emerge from crises more potent, and gain long-term sustainable success via cultivating those important features.

In-intensity dialogue of organizational resilience's traits, in addition to techniques for building resilience in numerous organizational contexts, may be provided in this paper. It will shed mild on how corporations can broaden the potential to foresee, adjust, and prosper in the face of uncertainty, making certain of their persistent success and relevance in a world that is changing all of the time.

Background

Organizational Resilience Definition

The potential of a corporation to foresee, plan for, react to, and adjust to primary disruptive activities is called organizational resilience. It includes the ability to tackle and alter to exchange, carry out crucial duties in the face of issues, and pop out on top in attempting situations. Challenges are not seen as insurmountable barriers by using resilient agencies, but rather as possibilities for improvement and change.

The importance of resilience whilst confronted with barriers

In the dynamic and unpredictable environment of today, the ability to overcome boundaries and cultivate resilience has emerged as a critical issue in determining the achievement of a company. Businesses confront a wide range of problems, from social unrest and environmental crises to technological improvements and monetary downturns. Organizations can correctly cope with these problems, reduce their results, and get over disruptive instances with the aid of constructing resilience.

The Motive of the Studies

This research objectives are to analyze the perception of organizational resilience, scrutinize its essential attributes, and pinpoint techniques for fostering resilience within organizational settings. Through an evaluation of the elements that make up resilient businesses, this research hopes to provide insightful analysis and beneficial guidelines for companies looking to enhance their resilience and prosper in the face of complications.

Goals and Questions for the Research

The following study questions are supposed to be addressed by this have a look at:

- What qualities distinguish resilient companies?

- What limitations must companies conquer with the intention to build and maintain resilience?
- What resilience-constructing approaches can groups use?
- How can resilience be assessed and measured using corporations?
- The following are the take a look at's goals:
  - Give an intensive rundown of organizational resilience.
  - Determine and observe the crucial factors that aid organizational resilience.
  - Create a structure for strengthening organizational resilience.
  - Make attainable hints on how agencies can support their resilience.

Importance of the Studies

This examination may be very precious to audiences in academia and exercise. It adds to the expanding corpus of know-how on organizational resilience for researchers by giving them better expertise of its theoretical foundations and actual global applications. It affords practitioners insightful recommendations on growing and setting into practice resilience-building techniques inside their organizations. Organizations can improve their capacity to address difficulties, maintain stability, and achieve long-term achievement in the face of adversity by using studying the elements that makeup resilience and imposing resilience-constructing strategies.

Literature Review

Conceptual Structure

Synopsis of theories of organisational resilience

Scholars reading organizational resilience's many aspects, reasons, and outcomes have found that it has emerged as a crucial notion in control literature. A wide variety of theoretical frameworks have been put forth to explain how resilience develops and is maintained inside companies.

Systems Theory Perspective

According to the structures principle, a company is a sophisticated adaptive machine made up of interdependent components that engage in outside-environment interaction. This standpoint highlights how vital remarks loops, adaptation, and studying are to supporting businesses to stay solid and ordinary and react to disruptions in a green manner.

Resource-Based View

The emphasis of the aid-based attitude is on how organizational resources help resilience. According to this principle, companies that possess precious, uncommon, unique, and non-substitutable (VRIN) assets are highly able to overcome boundaries and get better from screw-ups.

High-Reliability Organizations (HRO) Framework

The HRO framework identifies crucial tendencies that support resilience in tough and dangerous environments via drawing on know-how from sectors like nuclear electricity and aviation. Preoccupation with failure, resistance to simplification, determination to resilience, and ongoing getting to know are a number of those trends.

Adaptive Capacity Framework

The adaptive capacity framework places a sturdy emphasis on the price of taking preventative moves to reinforce resilience. It highlights anticipatory, preparedness, flexibility, learning, and innovation because of the five vital components of adaptive ability.

Important Ideas and Fashions

The literature on organizational resilience has given an upward push to several crucial thoughts and frameworks. These include:

- Anticipation: The capacity to recognise and foresee feasible dangers or interruptions.
- Preparedness: Creating plans and strategies to reduce risks and cope with adverse situations.
- Adaptability: The capacity to modify organizational strategies, techniques, and systems in reaction to converting conditions.
- Learning: The capability to enhance future resilience with the aid of deriving instructions from studies, each excellent and bad.
- Innovation: The readiness to adopt fresh perspectives and strategies to conquer barriers and take gain of opportunities.
- Psychological protection: An environment at work where workers are comfortable taking possibilities, owning as much as mistakes, and developing from setbacks.
- Leadership: Leaders must broaden a resilient attitude, deliver clear instructions, and encourage the body of workers members to innovate and adapt.
- Social capital: The networks of connections and not unusual values that promote cooperation, communique, and guide amongst individuals of a corporation.

These theories and frameworks provide a beneficial framework for comprehending the complicated nature of organizational resilience and developing realistic plans for fostering it.

Overcoming Obstacles and Promoting Adaptability in Organizational Settings: Obstacles in Organizational Settings.

Today's businesses face a wide variety of limitations that would disrupt their operations and jeopardize their long-term success. They work in a dynamic and unpredictable environment.

These difficulties may be divided into four primary classes: technological, environmental, human capital, and economic.

Financial Difficulties

Organizations in all industries retain to stand monetary difficulties. These problems can also appear as any of the subsequent:

- Economic downturns: Recessions and durations of financial stagnation can result in lower patron spending, a decline in the demand for goods and services, and higher economic stress on agencies.
- Uncertainty and volatility inside the international economic system can be brought approximately by political unrest, exchange price fluctuations, and exchange disputes. These factors can affect the operations of multinational companies and other businesses that have a presence in other nations.
- Regulatory adjustments: Organizations may also incur additional fees and follow greater requirements due to evolving regulatory environments, consisting of new tax, environmental, or labour laws.

Technical Difficulties

For businesses, technological advancements have both benefits and drawbacks. Fast technical change can present essential obstacles in addition to new probabilities for performance and creativity.

- Technological obsolescence: As a result of the lightning-speedy velocity at which generation is growing, groups may locate themselves obliged to make great investments in modernizing their infrastructure and enhancing their techniques to stay competitive.
- Cybersecurity threats: As a result of an enterprise's developing reliance on generation and the interconnectedness of digital systems, it is at risk of cyberattacks that could result in economic losses, reputational damage, and statistics breaches.
- Skills gap: Due to the swiftly changing nature of the generation, groups need to constantly retrain and upskill their personnel which will live competitively and keep up with the most modern traits.

Ecological Difficulties

Organizations are under increasing strain to cope with environmental troubles because of resource scarcity, climate change, and environmental policies.

These difficulties consist of:

- Climate trade: The effects of weather change, along with intense climate, growing sea ranges, and damage to herbal ecosystems, placed infrastructure, supply chains, and operations of businesses at severe threat.
- Resource shortage: As non-renewable sources are used up and the call for constrained assets like uncooked substances, electricity, and water rises, agencies may additionally face elevated expenses, supply disruptions, and reputational dangers.
- Environmental policies: Organizations may be in situations of extra prices and compliance burdens because of strict environmental rules designed to reduce pollutants, preserve biodiversity, and promote sustainable practices.

Human Resource Difficulties

Businesses cope with plenty of team of workers-related troubles, inclusive of:

- Demographic shifts: Talent availability, ability sets, and organizational tradition can all be impacted by getting older personnel, a decline in start quotes, and a boom in workplace variety.
- Skills shortages: Due to the quickening speed of technological advancement and the growing complexity of labour, agencies should locate and lease in position employees who can adapt to their changing desires.
- Employee engagement and motivation: In an aggressive expertise market, corporations have to find approaches to draw in, maintain, and inspire an incredibly professional and encouraged group of workers.
- Safety and properly-being at paintings: Preserving employees' bodily and mental fitness is critical to maintaining output, lowering absenteeism, and fostering a high-quality painting environment.

Elasticity Components

Management and leadership

One of the primary additives of organizational resilience is effective leadership. Leaders in resilient corporations exhibit the following attributes:

Visionary: They can explicit an attractive and distinct imagination and prescient for the future of the agency, imparting guidance and motivation in uncertain times.

Decisive: Despite missing or puzzling statistics, they may be capable of acting swiftly and decisively to make smart selections.

Communicative: They are capable of interacting with individuals of the company in any respect tiers, providing everyday updates which might be easy to understand, encouraging openness, and being honest and forthright while addressing troubles.

Empowering: They offer their body of workers the liberty to decide for themselves, be given an obligation for their work, and take part in hassle-solving.

Supportive: They foster a subculture of mental protection and well-being using presenting recommendations and help to the team of workers members throughout attempted times.

Culture in the organization

The resilience of an enterprise is substantially fashioned with the aid of its organizational culture.

The following traits define a resilient way of life:

Adaptability: It motivates the body of workers members to welcome change and modify to brand-new instances.

Innovation: It stimulates employees' creativity and pushes them to look for clean principles and answers.

Collaboration: It encourages records sharing and teamwork, permitting workers to collaborate efficiently. It places a robust emphasis on studying from mistakes and consistently looking for techniques to decorate tactics, items, and offerings.

Psychological protection: It fosters an environment wherein people are snug taking probabilities, expressing their concerns, and questioning the fame quo.

Well-being and engagement of personnel

A resilient agency is constructed on the muse of engaged and properly-being employees. The degree of ardour, dedication, and involvement that workers exhibit at paintings is called worker engagement. A worker's general notion of bodily, mental, and emotional well-being is known as their well-being.

Employees who can be glad and engaged are more likely to:

Become more inventive and efficient: They provide new insights, spark unique concept methods, and useful resources in problem-fixing.

Increase your resiliency when faced with boundaries: They have the psychological and emotional ability to deal with stress, alter to trade, and bear problems.

Increase your determination for the corporation's success: They consider the employer's task and goals and sense preferred and supported.

Adaptability and gaining knowledge

Organizational resilience requires getting to know and versatility. To respond to converting conditions, corporations want on the way to draw training from their beyond, pinpoint regions in which they can enhance, and modify their structures, tactics, and techniques. This necessitates a determination to ongoing schooling and development at every organizational degree.

Resilient agencies sell a tradition of getting to know by way of Encouraging team of workers members to take the price of their training: They supply groups of workers individuals the threat to study new abilities and data through mentorship, schooling, and self-directed observation.

Fostering an ecosystem that is secure for experimentation and creativity: They push teams of workers and individuals to take probabilities, try various techniques, and develop from their errors.

Sharing satisfactory practices and information: They make it less difficult for teams and departments to proportion expertise and talents.

Accepting disruption and trade: They see change as a risk for development and gaining knowledge as opposed to as a danger.

Research Design

Approach

Using a mixture of quantitative and qualitative information series strategies, a combined strategies method was used to observe the factors that cause organizational resilience. This approach captured the intensity of resilience-building strategies as well as the breadth of organizational demanding situations, permitting thorough information on the phenomenon.

Selection of Samples

50 groups representing pretty various industries were decided on as a sample for the research. The companies were picked to mirror a wide range of geographical places, sizes, and organizational configurations.

Information Gathering

Among the techniques used to accumulate records are:

Surveys: Each enterprise's employees were given a primarily based survey to finish to acquire quantitative information on how they perceived the organizational weather, resilience elements, and challenges.

Interviews: Key informants from every business organisation, together with HR experts, front-line staff individuals, and senior managers, participated in semi-primarily based interviews. The interviews delved deeply into the boundaries that the organizations had to triumph over, the strategies they used to construct resilience, and the factors that made

Case Studies: Top companies that were diagnosed as resilience exemplars had the difficulty of in-depth case studies. To pinpoint the quality elements that contributed to the companies' resilience, the case research entailed a careful evaluation of their management, choice-making methods, history, and lifestyle.

Moral Points to Remember

All at a few stages within the research gadget, ethical troubles had been of the utmost significance. Every participant gave their informed consent, and their privacy changed into safeguarded. Additionally, the researchers made certain that neither the businesses nor their group of workers suffered any bad results from the studies.

Analyzing Data

Statistical strategies like correlation evaluation and descriptive records were used to test the quantitative facts from the surveys. Thematic assessment changed into being used to find recurrent troubles and patterns within the qualitative facts from the case studies and interviews.

Results

A summary of the problems that companies face

The take a look at found that businesses nowadays face a whole lot of issues, which consist of:

- Volatility and uncertainty in the financial system
- Technology-precipitated disruptions and quick cycles of innovation
- Growing globalization and competition
- Shifting alternatives and expectancies of clients
- Issues associated with the surroundings and society, like useful resource scarcity and climate change

Determining the Resiliency Factors

The study moreover placed numerous other elements that useful resource organizational resilience, at the side of:

The capacity to modify and regulate strategies in reaction to transferring market dynamics and new threats is called strategic agility.

Organizational manner of existence: A lifestyle that encourages creativity, threat-taking, and teamwork. Effective control is visionary, resolute, and able to uplift and inspire personnel individuals.

Employee engagement: An immoderate degree of devotion to the company and engagement in the various bodies of workers.

Good communique: There is open and transparent communication throughout the complete business enterprise. Effective alternate management is the capability to decrease disruptions whilst coping with trade efficiently.

Learning and adaption: An ongoing mastering and adaption lifestyle.

The dating amongst Resilience Factors and Challenges

The look determined a giant dating among an agency's resilience factors and the troubles it faces. Resilient organizations are better organized to address problems, get higher from losses, and take advantage of increased possibilities.

Examining Cases

Additional understanding of the factors that assist organizational resilience changed into won from the case studies of the 3 version companies. Strong management, strength of will for employee engagement, and versatility have been the defining traits of these organizations.

Discussion

Interpreting the Results

According to the take a look at's findings, organizational resilience is a complex, multidimensional phenomenon that is predicated upon a substantial range of variables. These elements encompass organizational way of existence, mastering and model, robust communication, employee engagement, powerful trade management, and strategic agility. These tendencies assist organizations in overcoming obstacles, getting better from failures, and grabbing increased opportunities.

Organizational Management Consequences

The effects of the examination have numerous widespread ramifications for organizational control. The outcomes may be used by managers to:

- Evaluate the resilience of their employer and pinpoint regions in want of improvement.
- Create plans to help their organizations come to be extra resilient.
- Establish a tradition that encourages creativity, teamwork, and taking calculated dangers.
- Encourage a group of workers and contributors to take initiative and private their artwork.
- Maintain powerful traces of communication with all stakeholders and staff in the corporation.
- Minimize disruption and efficaciously manage alternate.
- Encourage surroundings this is continually studying and adapting.

The Study's Limitations

The study is a problem with several obstacles. First, the small pattern length of corporations may also have constrained how broadly the consequences may be executed. Second, self-said records, that is vulnerable to bias, changed into used inside the examination. Third, the test used proxies, which include employee perceptions and organizational climate, instead of at once measuring organizational resilience.

Research Ideas for the Future

Future studies want to be aware on:

- Creating an organizational resilience metric is extra considerable.
- Determining the proper strategies through which resilience elements help the success of businesses.
- Being aware of how context impacts organizational resilience.
- Creating interventions that resource resilience-constructing inside businesses.

Conclusion

In the twenty-first century, organizational resilience is a critical capacity for groups to have. Through comprehending the factors that bring about resilience, establishments can formulate techniques to successfully address barriers, bounce back from losses, and capitalize on expansion possibilities. The study's conclusions offer a beneficial jumping-off point for greater investigation into this vital task.

References

Brekke, D.Y.; Raphanin, Y.; Heras, M.L.; Berber, A. Deconstructing organizational resilience: A multiple-case study. *J. Manga. Organ.* 2021, 27, 422-441. [Google Scholar] [Crossruff]

Burnard, K.; Bhakra, R. Organisational resilience: Development of a conceptual framework for organisational responses. *Int. J. Prod. Res.* 2011, 49, 5581. [Google Scholar] [Crossruff]

Burnard, K.; Bhakra, R.; Stasinopoulos, C. Building Organizational Resilience: Four Configurations. IEEE Trans. Eng. Manga. 2018, 65, 351-362. [Google Scholar] [Crossruff]

Duchek, S.; Reitze, S.; Schaech, I. The role of diversity in organizational resilience: A theoretical framework. Bus. Res. 2020, 13, 387-423. [Google Scholar] [Crossruff]

Fiksel, J. Resilient by Design: Creating Businesses That Adapt and Flourish in a Changing World; Island Press: Washington, DC, USA, 2016. [Google Scholar]

Forburn, C.; Shanley, M. What's in a Name? Reputation Building and Corporate Strategy. *Acad. Manga. J.* 1990, 33, 233-258. [Google Scholar] [Crossruff]

Gittell, J.H.; Cameron, K.; Lim, S.; Rivas, V. Relationships, Layoffs, and Organizational Resilience: Airline Industry Responses to September 11. *J. Appl. Behave. Sci.* 2006, 42, 300-329. [Google Scholar] [Crossruff]

Hasan, I.; Kibeis', N.; Liu, L.L.; Wang, H.Z. Corporate Social Responsibility and Firm Financial Performance: The Mediating Role of Productivity. *J. Bus. Ethics* 2018, 149, 671-688. [Google Scholar] [Crossruff]

Ioana, I.; Serafim, G. The impact of corporate social responsibility on investment recommendations: Analysts' perceptions and shifting institutional logics. *Strategy. Manga. J.* 2015, 36, 1053-1081. [Google Scholar] [Crossruff]

McManus, S.; Seville, E.; Vargo, J.; Brunson, D. Facilitated Process for Improving Organizational Resilience. Nat. Hazards Rev. 2008, 9, 81-90. [Google Scholar] [Crossruff]

Searcy, D.L.; Ward, T.J.; Woodroof, J.B. Continuous reporting benefits in the private debt capital market. *Int. J. Account. Inf. Syst.* 2009, 10, 137-151. [Google Scholar] [Crossruff]

Sutcliffe, K.M. High reliability organizations (HROs). Best Pact. Res. Clin. Anaesthesia. 2011, 25, 133–144. [Google Scholar] [Crossruff] [PubMed]

Tasia, J.; Amir, S.; Tan, J.; Khader, M. A multilevel framework to enhance organizational resilience. *J. Risk Res.* 2020, 23, 713-738. [Google Scholar] [Crossruff]

Wang, H.; Han, B. Corporate Social Responsibility, Internal Control, and Corporate Sustainable Development: An Empirical Analysis Based on A-share Listed Companies on the Main Board. *J. Beijing Technol. Bus. Univ. Soc. Sci.* Ed. 2016, 1, 10. [Google Scholar]

Xin, J.; Liao, X. The Relationship between Corporate Sustainable Development and Corporate Social Responsibility. *J. Cent. South Univ. For. Technol. Soc. Sci.* 2013, 7, 4. [Google Scholar]

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 102-116

Green Human Resource Management Practices in India: An Empirical Study

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Abstract

Sustainable Business Development is the current innovation and requirement all over the World. Business models are modified to fulfill the ability of future generations to meet their business and survival needs. United Nations Sustainable Development Goals (SDGs) by 2030, adoption of Green HRM is gaining importance. Currently, Environmental preventive business actions are an inevitable step to be considered for framing future policies and strategies toward Green Human Resource Management Practices. Indian Sectors and Industries are integrated with sustainable environmental processes in the day-to-day work process. Green Resource Management is the required concept for the majority of HRM professionals and Entrepreneurs. It helps to make the organization's employees to get aware of the Eco-friendly Initiatives, to help the management to maintain and improve environmentally friendly practices to reuse energy and Healthy Practices. To implement the business needs with the environmental performance observing from the existing literature review for the developed practices. The objective of this study is to explore the existing Literature review from the previous study. This study also helps to know the implemented HRM practices in the Indian Industries. Also, it aims to study the benefits of Green HRM practices in various fields. This research also considered the needs and future awareness for Sustainable Environmental Performances.

Keywords: Eco-friendly Practice, Environmental Performance, Green HRM, Green Initiatives, Organization Structure, Sustainability

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Green Human Resource Management – Definition

Green human resource management is the emerging concept for sustainable development and corporate sustainability in India 2022. A broader definition considers GHRM as "phenomena relevant to understanding relationships between organizational activities that impact the natural environment and the design, evolution, implementation, and influence of HRM systems. Green HRM focuses on the transformation of normal employees into green employees to achieve environmental sustainability.

Green HRM Practices in India

Green HRM comprises two environmental factors. One Factor is Eco-friendly Human resource practices and preserving company growth. Another one is CSR (corporate social responsibility) which involves all the organization's employees in green initiatives. Through this research the concept of Green Human resource management, its benefits, implementation process are specifically focused on. In the current business needs, there is a growing research literature on Green marketing, Green accounting, Green retailing, and Green management in general. To implement a corporate environmental program several units of an organization's HR, Marketing, IT, and Finance departments need to work together.

Green Economical Initiatives for Sustainability

The "green economy has been referred to as a "sunrise economy" with a potential for job creation as has been the circular economy transition and the transition to appropriate technologies. Union Budget 2022-23 is encouraging for those looking towards a stronger sustainability thrust in the Government of India's agenda.

Significance of the Study

Business needs are more increased for future generations and the environmental Pollutions also increased. Organizations have to focus on Cost Reduction, Efficient use of energy, Proper utilization of resources, use of recycled products, and applying environmental-friendly procedures to become Green. As industrial waste has been deteriorating and depleting natural resources at a very fast rate. So the transformation has been made all over the sectors. **Government initiative toward Green Energy the Ministry of Finance has proposed several initiatives for the environment:**

- **Hydrogen Energy Mission –** The initiative involves generating hydrogen from green power sources, which has the potential to transform the transport sector.
- **Public Transport –** For the first time, the cabinet has allocated private

financing of INR 18,000 crores (USD 2.43 billion) for 20,000 buses, along with innovative financing through public-private partnerships.

- **Deep Ocean Mission –** The mission would undertake deep ocean survey and exploration as well as carry out projects that would protect deep-sea biodiversity.
- **Urban Swachh Bharat Mission 2.0 –** The government intends to effectively manage waste from construction and demolition activities and bioremediate all inherited landfills and focus on air pollution.
- **Consumer preference for Greener Products –** A recent study shows the new generation is aware of sustainable products. Consumers prefer to buy products from companies that emphasize waste reduction, carbon footprint reduction, and sustainable packaging.

Employees' Role in Encouraging Sustainability

The organization's goals must be comprised of the work behavior and improvised ways to reduce / reuse / recycle resources. The collective impact of sustainable behavior can reap rich dividends for organizations in the form of savings and reduction in environmental footprints. The Statistical reports also revealed that the awareness of Green Products, developments, and Green HRM Practices increased in India. More number of the employees have taken initiatives for the Green Disposal and Waste management system, they are eagerly participating in the weekend cleaning works.

Sustainable Human Resource Management (SHRM)

Sustainable human resource management (STHRM) is defined as "the management of human resources to meet the optimal needs of the company and community of the present without compromising the ability to meet the needs of the future". The term was interpreted from different points of view such as corporate sustainability.

Statement of the Problem

Green Environmental Initiations and GHRM Practices have made significant inroads into the organizations of this region in general and the organizations in various sectors in particular. The massive benefits of adopting and properly managing Green HRM practices in organizations cannot be over-emphasized. However, there is increased awareness to catch the Green HRM concept. The existing research has significantly established a positive relationship between Green HR practices and

Employee satisfaction, Organizational performance, and so on in organizations across the globe. The awareness needs to be implemented in several fields of the Indian Sectors. And the Government also needs to take initiative to start and develop the Green Business in India. Implemented Sectoral Industries have to be highlighted and need to be appreciated. The Employees who are interested in Corporate sustainability practices that emerged with Environmental sustainability goals need to be recognized with a Green rewards and Appreciation management system.

Literature Review

Summary of Green Human Resource Management Topics Published in India and other Countries

S No	Authour	Year	Title	Country	Remarks
1	R.K. Mishra, Shulagna Sarkar and J. Kiranmai	2014	Green HRM: innovative approach in Indian public enterprises	India	Study identifies best practices in GHRM that can be applied in CPSEs in India to contribute to sustainable development.
2	Shoeb Ahmad	2015	Green Human Resource Management: Policies and practices	Saudi Arabia	The study extant literature by discussing future direction of some GHRM functions and suggest HR initiatives for Green organizations.
3	Sonal Singh Rathi, Dr.Vikas Nath	2018	The Concept of Green HRM-A Review Of Literature	India	The study explores Green HRM practices of the organizations based on the existing literature.
4	Dr. R. Bhagyalakshmi, M. Priyanka	2018	A Study on Green Human Resource Management Practices Implemented In Chennai	India	The study concludes that the Green HR practices implemented well but some practices is not much impressive in Chennai City.

S No	Authour	Year	Title	Country	Remarks
5	Sabzar Ahmad Peerzadah, Dr. Sabiya Mufti, Dr. Nazir Ah. Nazir	2018	Green Human Resource Management: A Review	India	The contribution of study highlighting different significant works by other workers and at the end attempts to suggest some green initiatives for HR.
6	Dr. Shweta S. Kulshrestha, Shruti Srivastava	2018	Green HRM: A New Trend In Enhancing Green Behaviour At Workplace.	India	The paper focuses to explore the basics of this concepts, requirements and the findings of some green HRM studies done in past by great researchers.
7	Saylee Karande, Dr.Varsha Bihade	2018	Green HRM Practices in Corporate Sectors - for Environmental Sustainability	India	This paper shows green practices adopted by various organizations and suggest Top Management to make their new green HR policies for a sustainable environment.
8	B. Nalini and Dr. F. Alexander Pravin Durai	2019	Emerging Trends of HR practices in Green Initiatives	India	Study shows environment management system for the betterment of environment sustainability and use of natural resources in the effective manner.

S No	Authour	Year	Title	Country	Remarks
9	Ainsley Granville Andre Jorge Bernard, Dr. Rodney D'Silva, Dr. Brahma Edwin Barreto	2019	Green HRM and Sustainability Practices in Indian Companies	India	Results comes out implementation of policies by government and private sector with the aim of reducing the rapid destruction to the non-renewable resources and the ultimate negative impact it would have on society.
10	Dr. J. Krithika, N. Divya Priyadharshini, J. Gokula Priya	2019	Green HRM - Practices In Organizations	India	Results revealed strategic Green HRM practices and polices support sustainable use of wealth in the organization and develops employee confidence and satisfaction.
11	Manju Katarya, Ankit Kumar	2019	Green Human Resource Management: In India	India	In India many firm adopt Green HRM which help in environmental sustainability like Wipro Technology, Suzlon Energy, ONGC, ITC Limited and many more.

S No	Authour	Year	Title	Country	Remarks
12	Mamta Arora	2020	Green HRM in India: An Initiative for Environmental protection	India	Study shows significant increase in the level of environmental pollution and waste generated by factories, resulting in an increase in the implementation of policies.
13	Mamta Arora, Arpita Kaul	2020	Green Human Resource Management: An Empirical Study of India	India	This study shows Industry-specific studies on green HRM can be carried out which can provide key insights into different aspects of green HRM implementation.
14	Pidaparthi Sireesha	2020	Green Human Resources Management Trends In Present Scenario	India	The future of GHRM appears promising for all the stakeholders of HRM, to stimulate the field of HRM to expand its role in the pursuit of sustainable business.
15	Sapna, Anjali Gupta	2021	Implementation of Green Human Resource Management Practices: Barriers and Solutions	India	Green Involvement, Green Training & Development and Green Performance Appraisal. The results shows that there has been least awareness among the people.

S No	Authour	Year	Title	Country	Remarks
16	Kasturi Shukla and Swati Bankar	2022	Adoption of Green HRM Practices for Building Sustainable Models in the Indian Markets	India	Results showed that Green HRM awareness is extremely low. Moreover, studies have reported that individual green goals and personal moral norms of employees are the determinants and predictors of GHRM.
17	Mahmod, F.A., Sulaiman, S., Hairul Hisyam, N. N., Saruddin, N. F., Rahman, N. S., Shamsol Zailan, A. S., & Anual, N.	2022	A Conceptual Review On Green Human Resource Management.	Malaysia	Results shows that friendliness is a wise concept and its mainly focus on presenting the reviews of the literature on GHRM. The review helps to find out the research gap about the study.
18	Sfoorti Sheersh, Mahima Kochita, Dr. Bijalben Shah	2022	A Study On Green Hrm Practices And Its Impact On Indian Banks	India	The report discusses the essential concepts of GHRM, the GHRM practices used by Indian banks, and why banks are adopting GHRM practices.
19	Srinivasa Rao	2022	A Study On The Impact Of Green Environmental And Hrm Practices On The Organizational Performance In Select Organizations, Ap, India	India	The study has revealed that the significant Green Initiatives and HRM variables carry their influences on Organizational Performance.

S No	Authour	Year	Title	Country	Remarks
20	Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsaeng	2022	Impact of Green HRM Practices on Environmental Performance: The Mediating Role of Green Innovation.	Different Countries	Additionally, significant influences of study variables were recorded on outcomes such as green compensation and reward, green performance management and appraisal, green training and development, and green recruitment and selection.

The Objective of this Study

- The objective of this study is to explore the existing green HRM practices and relevant Literature Review.
- This study also helps to know about the influence of Green HRM Practices in Indian Industries and the exploration of various fields.
- This study also helps to study the benefits of implementing Green HRM practices in various fields.
- This study aimed to examine employees' role in social responsibility and sustainable performance.
- This research also considered the needs and future awareness for the Sustainable Environmental Performances

Current Needs of Green HRM Practices

Green HRM entails implementing eco-friendly HR programs that result in increased productivity, reduced prices, and improved employee engagement and retention, all of which help companies minimize employee carbon footprints through electronic filing, car sharing, work sharing, teleconferencing, virtual interviews, recycling, telecommuting, online recruiting and training, and energy efficiency, among other things. In the sector, Green Human Resource Management plays an important role in promoting environmental issues. HR policies and practices must be created, people must be trained to raise environmental awareness, and environmental laws must be implemented.

Implemented Green HRM Practices in India

The following section presents summaries of the existing certain implemented and exploring green HRM practices for Development.

Green Procurement System

Green Procurement consists of green Recruitment and green selection process of human resources in the organization. Nowadays many organizations are inviting employee details through websites and emails for recruitment. Online interviews, Virtual interviews, and telecommuting are green HR practices for the selection of candidates. It leads to the reduction of travel time, energy, and cost and reduces environmental pollution. These implementations also help the Interior Village Job-seekers and the inaccessible remote village graduate to attend the interviews efficiently.

Green Training and Development

Green training helps to increase the efficiencies of an employee to perform effectively the green HR practices like online training, teleconferencing, video call, Online course materials and case study, Web-based training modules, and interactive media are treated as green training tools. Organizations are helping employees to improve their skills. Also, green HR practices and learning plans include programs, seminars, and workshops to enable employees to develop and acquire knowledge in environment management.

Green Compensation and Reward Compensation

It enhances employees to perform their work very energize and enthusiastic in the Organisation. Organizations introduced compensation packages for the employee namely monetary compensation and non-monetary compensation according to the green skill acquisition, and contribution. Rewards and recognition like awards, promotion, public praise, appreciation, etc., is another technique to engage the employee in green contribution.

Green Performance Appraisals Methods

In Performance appraisal methods organizations include one of the scales as green Hr practices like familiarization of green issues, creating awareness of environment protection, reduction of pollution control, promoting environmental sustainability, and involvement and engagement of environmental management set as a key performance area of all level of employee to engage in an environmental management system.

Green Orientation System

The employee induction program is designed in such a way that new hires can be introduced to a green-conscious community. In the orientation program, employers should emphasize their concern for green concerns such as employee health, protection, and green working conditions.

Green Learning and Development

Learning and development are an approach that focuses on eroding agents' limits, capacities, and perspectives. Biological legitimacy trailblazers should provide planning materials to cultivate delegate data and capacities. Learning and progress can help agents find more productive ways to deal with their connections. Associations can employ automated media and computerized planning modules for routine organization preparation.

Green Employee Involvement

Green employee involvement is defined as "Creating an environment in which people have an impact on decisions and actions that affect their jobs" (Quagraine, 2015). Employee involvement is a continuous process of taking suggestions from employees on various environmental strategies. It also involves collecting feedback from the employees to improve the existing practices.

Green Building

Organizations around the globe are considering opting for green buildings as their workplace and offices as an alternative to traditional offices. The phenomenon is quite a trend setting as Green buildings fulfill the certain criterion for reducing the exploitation of natural resources that are utilized in their construction.

Green Health and Safety Management

Green health and safety management not only includes traditional health and safety management but also some added features of the environmental management of an organization. That is why nowadays many organizations are redesigning the post of "health and safety manager" as "health, safety, and environmental manager". This includes a wider job scope as compared to the traditional post of health and safety manager in an organization. The main role of green health and safety management is to ensure a green workplace for all.

Green Employee Discipline Management

Companies need to include policy manuals in employee discipline management and also in rules regulation to self-regulate employees in the environmental protection activities of the organization. In case, employees don't follow the rules and regulations for them disciplinary actions (warning, memo, fines, suspension, etc.) can be taken.

Green HRM Function as an Innovation

The adoption of HR practices like knowledge management, employee participation, recruitment and selection, employee training, and encouraging diversity and leadership is required to be integrated into environmental improvements for the firm (Gill, 2012). GHRM refers to practices promoting green initiatives by increasing employee awareness and commitment to the issues of environmental sustainability. The area of GHRM has high significance in organizations as it contributes to other functional areas of green management, green operations, green marketing, supply chain Green HRM management, green finance, and accounting. GHRM is considered to bear a holistic view of aligning employees with the company's environmental strategy.

Pathway to Eco-Industrial Development in India

Indian Government and Other Social Well-wishers have taken initiatives for Sustainable Business Practices. The following developments are mentioned relating to the Eco-Industrial Developments:

- Quality of Life/Community Connections
- Environment, Health & Safety
- Production Processes
- Materials
- Information / Communication Systems
- Transportation
- Production Processes
- Marketing
- Human Resources
- Energy

Recent Trends in Human Resources Management Department

- Human Resources Recruiting
- Joint Benefits Packages
- Wellness Programs
- Common Needs (payroll, maintenance, security)
- Training
- Flexible Employee Assignments

Research Methodology

To achieve the Object of this study, a systematic review of the literature was conducted by using an archival method. This paper employs a methodology to review the articles from different databases, websites, and other available sources with "green HRM" and other related topics that were being searched.

Conclusions

The research has overall considered the overview of the green human resource management practices literature review in the previous survey. It has been found that Green HRM practices have been implemented in several fields in India. The existing literature review reveals that the Green HRM Practices explore the Manufacturing sector, Services Industry, Banking/finance sector, Hotels Industry, Educational Institutions, and Engineering Sectors. This study is novel in the Indian context and can be extended to various other sectors like energy, travel and tourism, telecommunication, and biotechnology. Industry-specific studies on green HRM can be carried out which can provide key insights into different aspects of green HRM implementation. It would be useful to develop a green HRM index to quantitatively capture various features of green HRM. Future research efforts in this area should focus on extending the study sample to include a more diverse array of companies covering a broader range of activities. And also there are significant awareness Initiatives that need to take up.

Further Research for Implications

This research paper only considered the previous literature review and the existing literature review studies. Still, there is a need to focus on the other relevant requirements for the implications in Indian Industries. Green Participation, Green Talent management system, and Green Motivation and Development systems have to be implemented in these fields.

References

Ahmad, S. (2015, April 2). Green Human Resource Management: Policies and practices. *Cogent Business #38; Management*, *2*(1), 1030817. https://doi.org/10.1080/23311975.2015.1030817.

Ainsley Granville Andre Jorge Bernard, Dr. Rodney D'Silva, Dr. Brahma Edwin Barreto. (2019, August). Green HRM and Sustainability Practices In Indian Companies. *GAP GYAN - International Peer-Reviewed Open Access Journal of Social Sciences*, *II*(03), Article ISSN: 2581-5830. https://www.gapjournals.org/

B. Nalini and Dr. F. Alexander Pravin Durai. (2019, March). Emerging Trends of HR practices in Green Initiatives. *International Journal of Research in Engineering, IT and Social Sciences*, *09*(03), 1-3. http://indusedu.org

Dr. J. Krithika, N. Divya Priyadharshini, J. Gokula Priya. (2019, March). Green HRM - Practices In Organisations. *IOSR Journal of Business and Management (IOSR-JBM)*, *21*(03), pp: 74-77. https://doi.org/10.9790/487X-2103017477

Dr. Pothuraju Vijaya Lakshmi and Dr. Nagaraju Battu. (2018). A Study on Green HRM - An Emerging Trend in HR Practices. *International Journal* *of Management*, *9*(3), Article 74-82. & Issue=3. http://iaeme.com/Home/issue/IJM?Volume=9

Dr. R.Bhagyalakshmi,M.Priyanka. (2018). A Study on Green Human Resource Management Practices Implemented in Chennai. *International Journal of Research and Analytical Reviews (IJRAR)*, *05*(03), IJRAR190A055.

Dr. Shweta S. Kulshrestha,Shruti Srivastava. (2018, March). GREEN HRM: A New Trend in Enhancing Green Behaviour at the Workplace. *International Journal of Advanced Scientific and Technical Research*, *2*(8). https://doi.org/10.26808/rs.st.i8v2.01

"GREEN HRM" – A Road Map to Sustainability. (2019, February). *International Journal of Research and Analytical Reviews (IJRAR)*, *06*(01), Article (E-ISSN 2348-1269, P-ISSN 2349-5138). http://www.ijrar.org/papers/IJRAR19YP023.pdf

Green human resource management – the latest trend or strategic necessity? (2019, June 1). *Entrepreneurship and Sustainability Issues*, *6*(4), 1647-1662. https://doi.org/10.9770/jesi.2019.6.4(7)

Jamal, T., Zahid, M., Martins, J. M., Mata, M. N., Rahman, H. U., & Mata, P. N. (2021, March 10). Perceived Green Human Resource Management Practices and Corporate Sustainability: Multigroup Analysis and Major Industries Perspectives. *Sustainability*, *13*(6), 3045. https://doi.org/10.3390/su13063045

Khan, M. H., & Muktar, S. N. (2021, February 28). What's Next for Green Human Resource Management: Insights and Trends for Sustainable Development. *International Journal of Sustainable Development and Planning*, *16*(1), 181-194. https://doi.org/10.18280/ijsdp.160119

Kuo, Y. K., Khan, T. I., Islam, S. U., Abdullah, F. Z., Pradana, M., & Kaewsaeng-on, R. (2022, June 14). Impact of Green HRM Practices on Environmental Performance: The Mediating Role of Green Innovation. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.916723.

Mahmod, F. A., Sulaiman, S., Hairul Hisyam, N. N., Saruddin, N. F., Rahman, N. S., Shamsol Zailan, A. S., & Anual, N. (2022, August). A Conceptual Review On Green Human Resource Management. *International Journal of Accounting, Finance and Business (IJAFB)*, *07*(42), Article Special Issues pp: 39-48. https://doi.org/10.55573/IJAFB.074206

Mamta Arora. (n.d.). Green HRM in India: An Initiative for Environmental protection. *Palarch's Journal of Archaeology of Egypt / Egyptology*, *17*(10).

Mamta Arora, Arpita Kaul. (2020). Green Human Resource Management: An Empirical Study of India. *Visegrad Journal on Bioeconomy and Sustainable Development*, *09*(02). https://doi.org/10.2478/vjbsd-2020-0012

Manju Katarya, Ankit Kumar. (2019, March). Green Human Resource Management: In India. *Journal of Advances and Scholarly Researches in Allied Education, 16*(04). https://www.ignited.in

Mishra, R.K., Sarkar, S. and Kiranmai, J. (2014). Green HRM: innovative approach in Indian public enterprises. *World Review of Science, Technology and Sustainable Development*, *11*(01), Article 26-42. https://doi.org/10.1504/WRSTSD.2014.062374

Pidaparthi Sireesha. (2020, September). Green Human Resources Management Trends in Present Scenario. *Perspectives on Business Management & Economics*, *II*, Article ISBN: 978-81-947738-1-8.

Rao, M. S. (2022, April 30). A Study on the Impact of Green Environmental and HRM Practices on the Organizational Performance in Select Organizations, AP, India. *Environmental Smoke*, *5*(1), 1-9. https://doi.org/10.32435/envsmoke.2022511-9

Sabzar Ahmad Peerzadah, Dr. Sabiya Mufti, Dr. Nazir Ah. Nazir. (2018, March). Green Human Resource Management: A Review. *International Journal of Enhanced Research in Management & Computer Applications*, *07*(03), Article ISSN: 2319-7471. https://www.researchgate.net/publication/328277326

Sapna, & Gupta, A. (2021). Implementation of Green Human Resource Management Practices: Barriers and Solutions. *Journal of Scientific Research*, *65*(09), 71-77. https://doi.org/10.37398/jsr.2021.650911

Saylee Karande, Dr. Varsha Bihade. (2017, July). Green HRM Practices in Corporate Sectors - for Environmental Sustainability. *International Journal of Innovative Science and Research Technology*, *3*(7), Article ISSN No:-2456-2165.

Sfoorti Sheersh,, Mahima Kochita, Dr.Bijalben Shah. (2022, March). A Study on Green HRM Practices and its Impact on Indian Banks. *Journal of Emerging Technologies and Innovative Research (JETIR)*, *09*(03).

Shukla, K., & Bankar, S. (2022, March 1). Adoption of Green HRM Practices for Building Sustainable Models in the Indian Markets. *SDMIMD Journal of Management*, *13*(1), 1. https://doi.org/10.18311/sdmimd/2022/29464

Sonal Singh Rathi, Dr. Vikas nath,. (n.d.). The Concept of Green HRM - A Review of Literature. *Journal of Emerging Technologies and Innovative Research (JETIR)*, *5*(9).

Srinivasa Rao. (2021). A Study on the Impact of Green Environmental and HRM Practices on the Organizational Performance in Select Organizations, AP, India. *Interdisciplinary Thinking and Conservation Strategies Beyond Protected Areas*, *5*(01), Article 01-09 2022. https://doi.org/10.32435/envsmoke.2022511

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 117-128

A Study on Performance of Corporate Governance and Corporate Social Responsibility at Wipro Limited

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Abstract

Wipro Limited is a market leader in Information Technology, dealing in consulting, and business process outsourcing. Wipro Limited assists clients in succeeding the world of technology. Corporate governance ensures that companies have appropriate procedures and regulations maintained to make decisions, balancing the interests of all stakeholders. Disclosures are important to the company because they align with the values of high ethical standards, accountability, and transparency. They provide innovative concepts and connections to create a more promising and adventurous future. The term "corporate governance" describes the goals and methods adopted by Wipro Limited as a whole. Corporate Governance enhances decision-making with authority and responsibility. The term "corporate social responsibility" (CSR) describes the aims and actions that are used by the Company as a component of corporate governance to guarantee that their governance practices are morally righteous and advantageous to society. Wipro Limited focuses on building and nurturing capacity building, empowerment of communities, inclusive socioeconomic growth, environment protection, promotion of green and energy efficient technologies. Under the governance practices of Wipro Limited the company has made several innovations and adoptions in the arena of Technology. In this process, the "Wipro Education Fellowship Program," launched by the company in the year 2017, aims to encourage young people to get involved and contribute to education by establishing

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energetic non-profit organizations. The initiative has grown to become a thriving, dynamic network that serves some of the most underprivileged and excluded regions. Wipro Limited received various awards and recognitions for setting up corporate social responsibilities through its corporate governance. It secured a National award for excellence in corporate governance from the institute of company secretaries of India during the year 2004. There are numerous benefits to the company by the policies adopted in its CSR activities.

The present study covers the analytical reasoning through secondary source of information. It revealed that there is a positive correlation and proposes to its perpetuity.

Keywords: Corporate Governance, Corporate Social Responsibility, CSR Activities, CSR Committee, CSR Policy

Introduction

Corporate Governance and Corporate Social Responsibility

Corporate Governance in the current scenario has become synonymous with the practices and procedures used to direct and manage the affairs of a corporate entity.In addition to the achievement of business objectives, it is linked to societal expectations regarding corporate behaviour and its responsibility to shareholders and other stakeholders. Corporate governance should ensure that companies have to appropriately comply the procedures and regulations to make decisions, balancing the interests of all stakeholders. Disclosures are important to every company because they align with the values of high ethical standards, accountability, and transparency. They provide innovative concepts and connections to create a more promising and adventurous future. The term "Corporate Social Responsibility" (CSR) describes the aims and activities that are undertaken by the Company as a component of corporate governance to guarantee that their governance practices are morally righteous and advantageous to society. Corporate social responsibility (CSR) and corporate governance are closely linked to a company's ethical business practices and its ability to adapt to its internal and external environment while simultaneously considering societal issues and internal management challenges.

Concept of Corporate Governance and Corporate Social Responsibility

Corporate Governance (CG) and Corporate Social Responsibility (CSR) have been identified as two important concepts that have been focused on in the corporate world. There has been a lot of emphasis placed on successfully understanding and executing these two concepts.However, many advancements have taken place over the years that have paved the way for the incorporation of these concepts into the business practices worldwide**.**Good governance is the expectation of a stakeholder in every walk of life. For good Corporate Governance companies should comply Revised 49 Clause of SEBI Guidelines. Concept of Corporate Governance has gained strength after the incidents of Enron, WorldCom, Xerox, Lehman Brothers and in India, Satyam Crisis. Poor disclosures and Lack of Transparency in the Annual Reports should be overcome for the improvement in the governance practices. This expectation has been recently comeinto limelight to be recognized as a right in the corporate world. Corporate governance is, therefore, the new buzzword in corporate sector. Corporate governance is a mandatory of long-term corporate existence. Its importance and significance have greatly increased in the present era of Liberalization, Privatization and Globalization. Thus, corporate governance aims at enhancement of the long-term shareholder value, while protecting the interests of other stakeholders in society at large. Good corporate governance is essential not only for gaining credibility and trust, but also a strategy for survival, consolidation and growth. The main constituents of corporate governance are the shareholders, the board of directors and the management. (Elements of corporate law pg-1.216). The concept behind corporate social responsibility is that company should be held accountable for social issues in addition to government. According to more contemporary perspectives, Corporate Social Responsibility (CSR) is the voluntary integration of social and environmental concerns into business operations and stakeholder interactions. Being a company that values society norms, means more than just following the rules when making investments in the environment and human resources. In simple terms, the aim of the Corporate Social Responsibility (CSR) strategy is to encourage companies to take ownership of issues and challenges that were previously under state jurisdiction. Even after numerous attempts to provide a clear definition of corporate social responsibility, the term still lacks agreement. CSR is defined as “the company’s commitment to contribute to sustainable economic development by collaborating to improve the quality of life for employers, their families, the local community, and society at large in ways that benefit the business and the community at large. World Business Council defined Corporate Social Responsibility as “Corporate Social Responsibility is the ongoing commitment by Development,” that upholds moral principles, promote economic growth, and enhance the standard of living for those in the workforce, their families, the neighborhood, and society at large.

The following is the review of Literature in respect of the Concepts Corporate Governance and Corporate Social Responsibilities. Several studies were made in the area of Corporate Governance and Corporate Social Responsibility and they are mentioned below:

Review of Literature

- Rujitha (2012) examined Regulatory challenges associated with Corporate Governance and found that the loop holes in the law must be rectified. Companies should not be left to escape by taking advantage of the limitations of the clause 49 of the listing agreement. The function of the audit committee has been expanded to include oversight of risk management control system in order to foster adherence to sound corporate governance practices.
- Aggarwal (2013) examined the impact of corporate governance on firm financial performance in an Indian context using various statistical tests and concluded that a company's governance rating has a considerable beneficial impact on its financial success.
- Filatotchev and Nakajima (2010), suggested that an integrated approach involving both external and internal mechanisms helps to develop a more comprehensive picture of the effectiveness and efficiency of various corporate governance methods. As a result, the study utilizes both internal and external mechanisms of Corporate Governance interprets to demonstrate the relationship between these three components.
- Mahdi O, Mahdi M, Mohammad-Ali BV (2017) conducted a study on Corporate Governance, product market competition, and firm performance,they examined that there is a substantial relationship between the primary governance mechanisms (ownership concentration, board independence, and debt ratio) and product market competition and management performance. This study also demonstrated that product market competitiveness has an impact on the relationship between corporate governance and performance.
- Unadkat (2017), found that India has witnessed various enactments that have greatly contributed to enhancing governance norms and increasing accountability through disclosures. Interestingly, these changes have been influenced by the Anglo-Saxon corporate governance model. However, in order to achieve the intended results in India, regulatory measures based on Indian practices and business environments must be adopted.
- Frederick (1960) defined social responsibility as the duty of businessmen to supervise the functioning of an economic system that meets the needs of the general public. Seldom in his research examined CSR practices in India (Belal, 2001). Studies were performed at various times however ancient Indian literature highlighted corporate social responsibility (CSR) practices in India. In "Arthashastra," Kautilya outlines the duties

that traders have to the community in the distant past. These obligations weren't necessary; rather, they were voluntary in ancient India.

- Premlata and Anshika Agarwal (2013) discussed CSR in relation to Indian perspectives in their study. The researcher has looked through a number of publications, journals, papers, and other sources in an attempt to determine the significance of CSR in every business. Additional research has attempted to investigate the importance of CSR to the economy of our nation. The purpose of the paper is to determine the value of corporate social responsibility (CSR) in the current environment and how it will support economic growth. It also makes an effort to comprehend the challenges associated with implementing CSR and the necessity of CSR in the context of contemporary business philosophy. Through the use of numerous government websites, papers, policies, and other resources, the researcher has employed secondary data.
- An article by Windsor (2001) looked at the future possibilities for corporate social responsibility and the interaction between business and society. The study attempted to ascertain whether society and organizations would become closer in the future as well as in what stage CSR would change into with the aid of CSR's prior trends or history.
- Wharton (May 2012) suggested that CSR's importance change in line with the evolving generation. While previous experts like Milton Friedman referred to CSR as window dressing for firms, the researcher claimed that the next generation of businesses will place an excessive amount of weight on these activities. Furthermore, this article has explored how businesses that participate in corporate social responsibility (CSR) are more profitable in terms of money, human capital, and other resources with the aid of multiple examples.
- According to Mc William & S. Seigal (2010), corporate social responsibility (CSR) is an essential tool for improving a company's image. According to the report, companies who provide products that are strong and fall under the category of corporate social responsibility (CSR) see a rise in revenue and customer loyalty. Additionally, the study showed how crucial advertising is informing customers about the company's social welfare initiatives.

Need for the Study / Research Gap

From the above Review of Literatures, it is found that researches mostly contributed in the areas of Legal, ethical and Accounting. The present study is designed to provide insights to determine the practices, policies and activities of Corporate Social Responsibility and Corporate Governance, made an impact at Wipro Limited. Our focus is mainly on Health, Ecology, Education, Disaster HEED response Model.

Objectives of the Study

- To Study the framework of Wipro Limited's CSR activities and corporate governancebusiness practices, environmental stewardship, and social well-being.
- To analyze the performance of Corporate Governance and Corporate Social Responsibility at Wipro Limited.

Research Methodology

The basis of the study is secondary in nature. The data was collected through various sources, such as Books, Research Papers, Journals, Newspapers, And Websites. In order to establish the Wipro Limited is complying with Corporate Governance guidelines as per Rule 49 of SEBI and Good Corporate Social Responsibility practices tools such as Correlation, Regression and chi-square tests are used. The present paper is an attempt for an empirical study.

Period and Scope of Study

The present study considers a 5-year period data collected from Wipro Limited updated Annual Reports and attempts to study Governance parameters such as Chairman and CEO, Disclosures, Code of Conduct, Board Committees, Remuneration, Shareholders Grievance Committee, Transparency, General Body Meeting, Compliances and Stakeholders interest. In the area of Corporate Social Responsibility Behavioural Theory of Firm is adopted and KEJI Index which consists of 6 criteria such as, Soundness, Fairness, Contribution to Social Service, Consumer Protection Satisfaction, Environmental Protection Satisfaction and Employee Satisfaction were used to represent Corporate Social Responsibility Performance.

Limitations of Study

- The present study covers Corporate Governance and Corporate Social Responsibility of Wipro Limited Only.
- The study is confined to Health, Education, Ecology and Disaster Management (HEED) Model only.
- The study uses limited statistical tools to test the performance of Wipro Limited.

Corporate Governance Policies at Wipro Limited

Wipro Limited Corporate governance framework is driven with the objective of enhancing long term stakeholder value without compromising on standard ethical practices and Corporate Social Responsibilities activities. Wipro strives to maintain a balance between its objectives and the rights of minorities. The complete understanding of the roles and responsibilities of the Board, Senior Management, and other members of the organizational structure is necessary for effective corporate governance. Soundness, Fairness, Contribution to social services, Consumer protection satisfaction, and Employee satisfaction are key criteria that direct the relationships of the Board and Senior Management with other stakeholders.The "Spirit of Wipro" concept at Wipro Limited represents the core values by which the organization's policies and practices are guided. The spirit is deeply established in the unaltered essence of Wipro, but it also embraces a clear indication of purpose.Wipro Limited's identity reflects the Spirit of Wipro. Despite the fact that Wipro practices have transformed several times over the years, their essential beliefs have been constant. Furthermore, in early 2020, Wipro's Chairman introduced the Five Habits essential for fostering a growth mindset. With this initiative, Wipro Limited encouragedtheir leaders to demonstrate the fundamental behaviors aligned to each of the Five Habits that is being respectful, responsive,perpetual communicating, demonstrating stewardship and building trust. Wipro limited believes that the leaders will be the most visible examples of its culture. As the Wipro Limited promotes this message, they are encouraged to be exceptional role models for those around them.Wipro limited ensures that, this modification is essentially personal and is mainly driven by a person's desire to be flexible to learning through life.

Governance Parameters at Wipro Limited

Governance Parameters	Compliance	Points
Chairman and CEO	Yes	10
Disclosures	Regulation 46	10
Code of Conduct	Yes	08
Board Committees	Yes	10
Remuneration	Yes	3.2
Shareholder's Grievance Committee	Yes	10
Transparency	Yes	10
General Body Meetings	As per MCA	10
Compliances	Yes	10
Stakeholders Interest	Yes	10
	Total - 100	91.2

Observation

From the above governance parameters at Wipro limited it is observed that it is meeting the requirements to the extent of 91.2% which is highly appreciable. Few Governance parameters secured complete points but code of conduct and remuneration have not reached bench mark. Remuneration of personnel has secured less than 50% of the points which means the company has to adopt fair remuneration to personnel policy.

	Compliance	Points
Compliance	1	
Points	0.200003673	1

Correlation = 0.2000

Regression Analysis

Compliance	Points
0.41	
0.264	4.2496

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	39.812[a]	25	0.030
Likelihood Ratio	21.648	25	0.656
N of Valid Cases	13		

a. 36 cells (100.0%) have expected count less than 5. The minimum expected count is .08.

FEJI Index

Items	Details	Allotted Scores
Soundness	Corporate Governance	11.0
	Investment	6.0
	Corporate Finance	8.0
Fairness	Fairness	14.0
	Transparency	6.0
Social Contribution	Employment equality	7.0
	Social Contribution Activity	6.0
	Contribution to Nation	2.0
Consumer Protection	Consumer Rights	7.0
	Consumer Law	5.0
	Consumer Safety	3.0
Environmental Management	Environmental Improvement Effort	5.0
	Environmental Friendliness	2.0
	Observation of Environmental Regulations	3.0
Employee Satisfaction	Workplace Health Safety	3.5
	Human Resource Development	2.0
	Salary and Benefits	2.5
	Labour Management Relationship	7.0
Total	KEJI Index	100.0

Source: https://creativecommons.org/licenses/by/4.0/

	Items	Allotted Scores
Items	1	
Allotted Scores	-0.8831	1

Correlation

	Items	Allotted Scores
Items	2.9166667	
Allotted Scores	-5.375	9.941358025

Covariance

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	190.000[a]	180	0.290
Likelihood Ratio	86.568	180	1.000
N of Valid Cases	19		

a. 209 cells (100.0%) have expected count less than 5. The minimum expected count is .05.

From the above table of KEJI Index, the factors for effective governance practices have reached the effective levels in order to enhance the revenue and spend for the society in the form of Social Responsibility criteria.

Activities of Corporate social Responsibility at Wipro Limited

Wipro Limited is a multinational information technology, consulting, and outsourcing firm that serves clients in more than 175 cities on six continents, employing 156,866 people. The business reported $7.3 billion in revenue for the financial year that concluded on March 31, 2014. The company is currently financially stable, which has inspired them to engage in corporate social responsibility by making a contribution to society. The following are the Corporate Social Responsibility (CSR) activities of Wipro Limited., under HEED Model.

- **Health Care -** Based on Wipro Ltd, health is a fundamental enabler. The situation is very disturbing, particularly in the villages and rural areas. However, public healthcare systems have been overburdened by growing urban migration; basic healthcare and sanitation facilities are frequently insufficient. The majority of their factories are located in impoverished rural areas with limited access to medical care. Their health care initiatives seek to offer primary healthcare and serve as a spark for the community's general growth.

- **Education -** In addition to other activities,Wipro Limited Cares focuses on providing for the educational needs of the urban poor. For a variety of reasons, the educational requirements of children in this category are frequently disregarded. With the operation of bridge schools, non-formal schools, and vocational training, Wipro ltd Cares seeks to assist these children by providing them with chances for overall educational and social development.Wipro Ltd. also provides training to educators on how to interact empathically with these kids. They also promote education for girls and help a school for kids with hearing impairments.
- **Ecology -** Wipro Ltd. has participated in numerous environmental initiatives as part of its strong commitment to ecological sustainability, both inside our corporate ecosystem and in the public and private spheres. Our sustainability initiative, which is also known as eco-eye, was established back in 2008. Our program's four pillars are biodiversity, waste and pollution management, responsible water use, and carbon mitigation and energy efficiency.
- **Disaster Rehabilitation -** There is always a sense of urgency to aid those in need and provide relief after a calamity. Unfortunately, the reduction is the primary focus or limitation of most of this support. The impacted individuals require ongoing support to restore their life once the relief phase ends. Therefore, Wipro Ltd. initially interacts with such individuals to understand their needs before offering support in order to assist those affected parties.We have worked with communities affected by disasters on a number of long-term rehabilitation projects as well as short-term relief efforts over the years. We have already assisted in the reconstruction of lives destroyed by floods in Karnataka, Bihar, Odisha, the Philippines cyclone, Hurricane Sandy, and Japan.

Other Activities include

- **Cities And Public Places**: In 2018, we added "Public Spaces in Cities and Communities" to our CSR activities. promoting inclusive public areas in our cities that are intended to be open to the general public, such as areas for sports, the arts, theatre etc.
- **Volunteering at Wipro**: Learning Enhancement Programs have been introduced by Wipro Ltd Cares at schools serving children from the disadvantaged segments of society. The primary goals of these programs include raising learning standards, boosting self-esteem, stimulating curiosity, and enhancing English communication skills.This project was completed by a group of committed volunteers.

Year	Amounts Allocated (Rs in Crores)	Amount Spent Rs in Crores)	Net impact
31 March, 2023	198.6	215.7	2.2%
31 March, 2022	154.7	183.2	2.3%
31 March, 2021	165.6	251.2	3.03%
31 March, 2020	181.8	166.9	(-)1.8%
31 March, 2019	1848.33	1853.00	2.01%

CSR Amounts Allocations and spendings for a period of 5 years are displayed on the above table. From the above information, it can be drawn that Two percent of average net profit of the company as per Section 135(5) is mandatory but the company has spent more than the specified amount During the year 2019-20, and 2022-23 except 2020-21 as the reduction is presumed to be on account of the then prevailing situation. All the areas under HEED model, Health, Education, Ecology and Disaster Management have been met as the spending have shown a commendable quantum.

Findings and Conclusion

From the above study it is found that Wipro Limited has met the compliance norms in respect of Corporate Governance and Corporate Social Responsibility during the period of 2019-20 to 2023. In India, the neglected areas of Health, Education, Ecology and Disaster Management have been undertaken by the company and strived to provide the satisfactory spendings under corporate responsibility policies. In respect of Corporate Governance, KEJI Index has secured the full score where as in Corporate Governance practices it has secured 91.2% which is very high. Wipro Limited followed ethical responsibility in respect of the people concerned with it. Particular attention is placed on the financial dealings with openness. Administration is handled efficiently by senior management. Corporate Social Responsibility has been stable and application based. Regulatory framework has been adopted for transparent administration.

References

https://www.wipro.com/content/dam/nexus/staticsites/annual-report-2023/pdf/corporate-governance-report.pdf

https://www.researchgate.net/figure/Description-of-KEJI-index-items_tbl3_353385164

https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2022-2023/integrated-annual-report-2022-23.pdf page 112

https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2021-2022/integrated-annual-report-2021-22.pdf page 101 https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2020-2021/integrated-annual-report-2020-21.pdf page 105

https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2018-2019/annual-report-for-fy-2018-19.pdf

https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=15648

https://www.researchgate.net/publication/334176128_Corporate_Social_Responsibility_A_Literature_Review

https://psycnet.apa.org/record/2002-13712-001

https://knowledge.wharton.upenn.edu/article/from-fringe-to-mainstream-companies-integrate-csr-initiatives-into-everyday-business/

https://www.researchgate.net/publication/234074936_Corporate_Social_Responsibility_A_Theory_of_the_Firm_Perspective

http://ijrar.com/upload_issue/ijrar_issue_20543494.pdf

https://www.scirp.org/(S(351jmbntvnsjt1aadkozje))/reference/referencespapers.aspx?referenceid=3289300

https://www.scirp.org/(S(vtj3fa45qm1ean45%20vvffcz55))/reference/referencespapers.aspx?referenceid=2591437

https://fbj.springeropen.com/articles/10.1186/s43093-021-00093-6

https://shodhgangotri.inflibnet.ac.in/bitstream/20.500.14146/8461/2/02_synopsis.pdf

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 129-142

Scope of Corporate Social Responsibility (CSR) in Implementation of Special Training to Out of School Children (OoSC)

'A provision under Section 4 of Right to Free and Compulsory Education (RTE) Act 2009'

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Abstract

Special Training to Out of School Children (OoSC) of age 06 to 14 years to mainstream them in their age – appropriate classes is an innovative and participatory model of concept under Section 4 of Right of Children to Free and Compulsory Education (RTE) Act 2009. The children belonging to disadvantaged groups and weaker sections mainly comprise in the category of Out of School Children, which includes both never-enrolled and drop-outs. These children are more at risk of exploitation and are susceptible to the criminal activities and child labour, which is not only dangerous for child but also for the society. Those who have remained backward and underprivileged over the years can be empowered through education to assert their rights and to fulfill their assigned roles in the society. Apart from poverty, these children encounter various barriers in schools and society like derogatory references to their communities, first generation learners, no education environment at home, lack of parental guidance in studies, lack of motivation to learn, fear to loss of secondary income etc. To address these issues, there is a provision under Section 4 of RTE Act 2009 for Special Training of out of School Children (OoSC) who are of age 06 to 14 years and still not admitted in the formal School. It is guided by flexibility and innovation at multiple levels – training of teachers for providing Special Training, development of educational material accustomed to activity based learning, establishment of regional resource centre for providing training and development of pedagogic tools, conducting of household survey for identification of Out of School Children etc. It also encourages involvement of community members in

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school activities to reduce the social distance between school and the community.

Corporate Social Responsibility (CSR) intervention in the different aspects of Elementary Education is well known. Though, the role of CSR in the implementation of ibid provision is not mentioned in the RTE Act 2009, this paper attempts to introspect the scope and role of CSR in working hand in hand with the Government machinery in facilitating the Special Training to Out of School Children.

Keywords: Corporate Social Responsibility, Drop Outs, Out of School Children, Special Training

Introduction

"*Successful Public-Private partnership play a key role in realizing the goal of having every child in the school and learning well"*

Ms. Karin Hulshof,
Deputy Executive Director of UNICEF

Education is regarded as a potential instrument for overall development of individual as well as social upliftment. Education is a fundamental human right. Every girl and boy is entitled to it. Education is the single most important means by which individuals and society can improve personal endowments, build capacity levels, overcome barriers and expand opportunities for a sustained improvement in their well being. The Government continues to be the major provider of Elementary education with 90.2% primary schools and 72.2% upper primary schools managed either by Government of local bodies. Quantitative supply side barriers along with economic demand side barriers have been mitigated by building new schools, additional classrooms, improvement in basic facilities i.e drinking water, separate toilets for girls and boys, abolition of school fees, provision of incentives in the form of free uniforms, stationery, waiving of exam fees and scholarship schemes. This has resulted in better accessibility of schools and increase in the enrolment of children in primary schools. Today 98% habitations have the accessibility to primary schools within a kilometer.

Also, programmes initiated by the Government under the aegis of Sarva Shiksha Abhiyan (SSA) such as Educational Guarantee Scheme (EGS), Alternate and Innovative Education Centres (AIE), Kasturba Gandhi Balika Vidyalaya (KGBV) and National Programme for Education of Girls at Elementary Level (NPEGEL) had targeted the most disadvantaged children who are out of school, specially SC, ST, girls, Muslim children to provide innovative and flexible learning opportunities along with residential facilities. Despite the sincere and concerted efforts by the government, the unfortunate reality is that millions of children in India are still out of school. As per the South Asian Regional Study conducted by UNICEF (Jan 2014) covering Bangladesh, India, Pakistan and Sri Lanka, India has the second highest number school children not getting education i.e 11.9 million, only after Sub-Saharan Africa. Also, according to the National Sample Survey of Estimation of out of School Children in the Age 6-13 in India, 2014, conducted by Social and Rural Research Institute (SRI) commissioned by Ministry of Human Resources Development, there are around 6 million out of school children. The previous survey, which was conducted in 2009 had estimated 8 million out of school children. The majority of Out of School Children belongs to Scheduled Caste families and the position of Scheduled Caste girls is even worse.

The Government of India is signatory to important education interventions initiated by the United Nations such as Education For All, Convention on The Rights of the Child (CRC), Millennium Development Goals and Global Education Frist Initiative and accordingly mandated to provide free and compulsory quality education to each and every children upto the age of 14 yrs at least upto elementary level. To realize this goal, it is necessary to have provision, so that out of school children, who are mainly from disadvantaged society, are identified and admitted for Special Training so that they are successfully enrolled in the age appropriate classes and pursue education.

The Parliament had passed Right of Children to Free and Compulsory Education (RTE) 2009, which came into effect from 01 Apr 2010. Under section 4 of this Act, there is a provision for Special Training of out of School Children. The intervention is special and different from previous ones as it puts a special responsibility on the parents, school teachers, elected representatives of local bodies, social activist as member of School Management Committee (SMC) for identification of out of school children by conducting household surveys, counselling and convincing the parents to enroll their children in schools. The children are first enrolled in the government school in their age appropriate classes and are entitled to avail benefits provided by the government like free school uniforms, books, stationery, Mid-day Meal (MDM). After admission, Special Training is provided to Out of School Children at Special Learning Centre (SLC) which is generally located in the school premises. The Special Training is provided to improve the learning abilities and accustomed them to the school disciple and environment and also helps them to mainstream in their age – appropriate class and be at par with other students of their age in respective class. The Special Training is provided with the help of Special Learning Support material (SLSM) which is a condensed curriculum, prepared by

District Institute of Education and Training (DIET) and approved by the State Council of Educational Research and Training (SCERT).

One of the biggest challenge in making RTE Act a success, is not only bring back the six million Out of School Children in School but also to ensure that they quality education and complete Elementary education successfully. The implementation of the RTE Act with full sincerity and commitment is very important for inclusion of children those who are not likely to be enrolled, unless being supported, empowered and encouraged by the parents, local bodies and school authorities.

Special Training to Out of School Children Under Section 4 of (RTE) Act 2009 and Its Important Features

The 86th Constitutional Amendment Act 2002 provisioned Elementary Education a Fundamental Right for Children in the age group of 06-14 yrs under Article 21 'A'.

The Right of Children to Free and Compulsory Education (RTE) Act passed by the Parliament in 27 Aug 2009 aims at reaching to the unreached and disadvantaged children above 06 years of age and has not yet been admitted to any school or though admitted, could not complete his or her education, then, he or she shall be admitted in a class appropriate to his or her age. To accomplish this task there is a provision in RTE Act under Section 4 for Special Training of Out of School Children (OoSC) for duration of minimum 03 months to maximum 02 years, in order to be at par with others. Also, mandated that a child so admitted to elementary education shall be entitlement to free education till the completion of elementary education even after 14 years.

The provision is Special because children, those who are underprivileged and at disadvantaged position get an opportunity to enroll in formal schools round the year after obtaining Special Training (bridge course) and also administrative requirements have been curtained i.e., admission will not be denied to any children for want of birth certificate, residence proof, transfer certificate etc, therefore, facilitating smooth and easy admission procedures for enrolment of maximum children.

Out of School Children (OoSC) are those children who are 06 -14 years of age and not enrolled in school. They are further categorized into two groups: never enrolled and drop outs. Children never enrolled, as the term applies, have not previously attended formal school. Children who have dropped out have enrolled in school at one point, but quit before she/he completes the education or have been absent from school without prior intimation for reasons of absence for a period of 45 days or more.

While the 'Never Enrolled' children may be increasingly integrated within the system over the next few years, the issue of dropouts will need sustained mechanism to address it. Besides social and economic reasons, the school system has perhaps been unable to connect with vulnerable children. School drop outs cite lack of interest in school, negative experience in schools and a sense of under achievement as primary reasons for dropping out. Majority of Out of School Children belongs to disadvantage communities – Scheduled Castes, scheduled tribes, Muslim, migrants, children with special needs, urban poor, working children. Girls comprise a bulk of Out of School Children.

There is a great heterogeneity among children who are out of school. The various categories of out of school may include children living or working in urban slums, in streets, on railway platforms or construction sites. They may be found engaged as domestic workers, child labourers, engaged in cattle grazing, working for wages in dhabas, mechanic shops etc. Among the dropouts, the highest percentage is of Children belonging to tribal families and the next are Children belonging to Scheduled Caste families.

Photographs of Out of School Children

The training given to the Out of School Children which comprises of never enrolled and drop outs is special in many ways:

- Conduction of door to door surveys in unrecognized colonies, slum clusters, construction sites etc to find out and enroll children of 06 to 14 years of age who are not admitted to the school yet.
- Assessment of the children's knowledge in various subjects and skills before admitting them for Special Training.
- Arrangement of special classes. Most probably in the Government schools or in safe places. Assistance and expertise from NGOs, working in this field are invited. It can be residential or non-residential facility.

- Builds confidence and motivate them to start taking interest in learning various subjects. Activity based teaching and learning is promoted for easy and fast understanding the topics.
- Teaching them with the help of Special Learning Support Material (SLSM). For Out of School Children (OoSC), an intervention, which enables learners to develop their competency levels as per their age, through condensed curriculum, in a short duration i.e., to help the learners bridge the gap between them and their peers, who have been attending school, are referred to as Special learning Support material.
- The training is time bound. Minimum for 03 months and maximum upto 02 years.
- Periodical assessment and evaluation on quarterly basis in respect of child's competency level in various subjects for mainstreaming them in formal school in their age appropriate classes.
- Continuous support and help, even after mainstreaming them in the formal school, so that they can successfully complete their elementary education and aim to pursue higher education.

Role and Responsibilities of Different Functionaries Involved in Providing Special Training

To achieve the goal as envisioned in this provision, different agencies are involved to perform their respective tasks which are not only well coordinated but also a medium term vision for one another. The role and responsibilities of different functionaries are as follows:

- School Management Committee (SMC) and Local authority –
  a) Under Section 21 of RTE Act 2009, there is a provision for constitution of School Management Committee in each and every aided school. It shall consist of elected representatives of the local authority, parents or guardians of children admitted in such school and teachers.
  b) The RTE Act gives immense importance to SMCs being the decentralized structure, and one in which the parents have a preponderance. The three fourth members consist of parents or guardians, therefore places a greater responsibility on them.
  c) The School Management Committee (SMC) along with the Local Authority (PRIs and Municipal bodies) *shall identify the out of school children (non-enrolled or drop outs)*. Make special efforts to motivate parents to admit such children in the neighboring schools. Provide all possible support to parents for enrolling Out of school children and make provision for Special training of such children.

d) The SMCs *shall maintain Child profile to maintain record of all such children and monitor their regularity in schools*. Also, the record shall be updated once in every three months. The information of such children may be displayed on the notice boards of the village panchayat and schools in its jurisdiction. SMCs will have regular interaction with *the parents and also with the children, for sustaining their interest in the schools*.

- Head Teacher / Principal

a) The Head Teacher / Principal will *shoulder the responsibilities to conduct the survey of out of school children in the neighborhood once in every 06 months*.

b) *Ensure the suitable location for Special training in consultation with SMC and local authority / NGOs.* It can be organized in the school premises, at cluster resource centre, Panchayat Bhawan, Community centre or any other suitable place.

c) Make suitable arrangements to *conduct entry level test, quarterly tests and final achievement tests* to assess the children's, learning levels at regular intervals. They will *arrange Special Learning Support Materials (SLSM) and provide to children*.

d) The Head Teacher / Principal along with school authorities shall *grant admission to such children in age appropriate classes.*

e) They shall provide necessary resources to *create a conducive atmosphere and provide necessary support to these children.*

- Teacher

a) Teacher's role is *crucial in the whole exercise of organizing special training with regard to conducting training as well as planning, development and execution of test items for each level.*

b) It is also likely that some children are unable to cope with new situation after entry to the school. In such situation, children need special assistance of teachers to achieve knowledge/ competencies and develop adjustment ability with other children in class. Teachers in particular *visits households during survey/ enrolment drives to motivate parents for sending their children to school*.

c) They *participate in developing special training modules, Special Learning Support Materials (SLSM) and sensitization programmes.* They *acquaint themselves with the psychological, emotional, educational and social needs of children with special needs.*

d) They *report progress of children to higher authorities at cluster/ block/ district levels* and attend meetings with them for further planning.

e) Make *necessary arrangements for age appropriate admission of children* after they compete a certain period of special training.

(iv) Cluster Resource Centre Coordinators (CRCC)

a) CRCC is *responsible for conducting and monitoring special training programs* in the schools concerned.

b) *Visits to the special training centre's at regular interval to provide necessary academic guidance* and *on-site support to teachers*.

c) They work as a *link between Block Resource Centre and schools in sorting out the academic and administrative issues, if any*.

d) They *make sure that children are mainstreamed to their age appropriate classes and continue their studies in the schools*.

- Block Resources Centre Coordinators (BRCC)

a) BRCC *keep the list of out of school children of the concerned block.* They should *plan and organize the special training* as per their requirement.

b) With the help of CRCC, annual *plan should be prepared every year and approval for the same should be taken from the higher authorities*.

c) BRCC *ensure supply of required Special Learning Support material* to the schools/center's.

d) BRCC *keep the record of such teachers/ volunteers and NGOs, who are involved in the special training program* for children.

- State Council of Educational Research and Training (SCERT) and District Institute of Education and Training (DIET)

a) The SCERT and DIET or any such authority as deemed appropriate by the state Government *ensure planning and developing Special Learning Support Materials (SLSM) by adopting core components of curriculum.* It should *incorporate local specific and contextual materials*.

b) They plan *appropriate capacity buildings training programme for teachers CRCC, BRCC functionaries and volunteer from NGOs,* for effective assessment of children and its follow up strategies.

c) They should *ensure that teachers are trained in designing assessment tools based on local context and syllabus.*

- National Council of Educational Research and Training (NCERT) and National University of Educational Planning and Administration (NUEPA)

They play *advisory role in providing various guidelines, academic support and orientation of state level key functionaries*.

Scope of Corporate Social Responsibility in Providing Special Training to Out of School Children

Business dictionary defines Corporate Social Responsibility (CSR) as "A company's sense of responsibility towards the community and environment (both ecological and social) in which it operates. Companies express this citizenship (i) through their waste and pollution reduction processes, (ii) by contributing educational and social programs and (iii) by earning adequate returns on the employed resourses". We are all aware that Corporates, companies are under obligation to perform

The provision regarding CSR in the Companies Act 2013 has brought within its ambit all the companies with at least Rs 5 crore net profit or Rs 1000 crore turnover or Rs 500 crore network, making it mandatory for them to spend 2% of the three years average net profit on CSR activities. TATA, Nestle, Coca Cola, NDTV, Times group, ITC, P &G, Wipro, Aditya Birla Group, Canon and many other corporates are contributing for positive development of society, whether it is in field of waste management, old age homes, hospitals, parks, providing education to children belonging to disadvantaged and weaker sections. There are many successful initiatives undertaken by the companies under CSR in the field of education. To mention a few are as follows:

Times Group	-	Teach India Initiative
Bharti Airtel	-	Satya Bharti School Program
Rural Electrification Limited	-	Providing education to Rural children
Azim Premji Foundation	-	Running schools for under privileged children
Microsoft	-	Project Shiksha for under privileged children
P & G Group	-	Girl Education

In addition to this, TATA group, ITC group, Reliance, GAIL, SAIL etc. are running institutes for technical and vocational studies to train students in vocational skills to help them emerge as employable citizens. The companies are indulge in education sector under CSR obligation in one way or other. Now, it is the time to introspect the role of CSR vis-a-vis with provisions of RTE Act 2009 to provide a standard guidelines for the framework of implementation under CSR and also to be in sync with the objectives of RTE Act. The scope of CSR in providing the Special Training Out of School Children, a provision under Section 4 of RTE Act 2009 are as follows:

- Raising awareness about the provisions of the RTE Act – Companies under CSR obligations may participate actively along with school teachers, local bodies in raising awareness about the provisions of the RTE Act to the public, employees and volunteers with the help of media exposure, ads, campaign, and visits to rural and urban slums. It is very important to for any Government policy to successfully penetrate up to the local level. Once, citizens are aware about their rights and entitlements provisioned by the Government, then only they can avail the benefits. Therefore, raising awareness is initial step for successful implementation of policies/programs.

- Inclusion of Rep of CSR in the School Management Committee (SMC) – Though there is no provision for inclusion of rep of CSR in the School management Committee (SMC) under RTE Act 2009, but there presence in the SMC will be fruitful in terms of awareness of innovative ideas/ practices initiated by the CSR to other members of SMC, proposal of opening of new Special Learning Centre (SLC) by CSR, exchange of useful data regarding Out of School Children in nearby habitation and financial support, if any.
- Preparation of Special Learning Support Material (SLSM) – Volunteers employed by the companies under CSR for teaching Out of School Children, may be resourceful in the preparation of Special Learning Support material (SLSM). SLSM is condensed curriculum, used to improve the learning abilities of Out of School Children admitted in Special Learning Centre (SLC) run by the government. The SLSM is prepared by the District Institute of Education and Training (DIET) and approved by the State Council of Educational Research and Training (SCERT).
- Pooling in trained manpower and financial resources – The companies under CSR obligation are adequately resourced in terms of trained manpower and availability of funds for implementation of an educational program, especially for under privileged children in small/medium scale. It can be functioned in more unified manner and also to avoid any duplication of Special Learning Centre, specially covering the children residing in Urban Slums, collaboration with the Block Urban Resource Centre Coordinator (BURCC) is worthwhile.
- Capacity Building Training – The Capacity building training for teachers, parents, social activist and rep of elected local representative are conducted by various government authorities BURCC, DIET, SCERT and NCERT. This training acclimatize the members about the need and importance of the provisions of RTE Act 2009 and to perform their duties accordingly. The volunteers of CSR run educational institutions may be included in the capacity building training and also may organise workshops for them so that they are not only performing

their respective companies CSR obligation but also progressing towards the achievement of goal as mandated in RTE Act 2009.

- Interlinking with ongoing CSR's Technical / Vocational Education – As we are aware that many companies for ex TATA, GAIL, SAIL, Reliance Group, ITC etc. under CSR obligation are running Technical and Vocational institutions. These institutions provide technical and vocation courser and train youths to be become skilled and employable citizen. These institution also provide scholarships to meritorious especially those belonging to disadvantaged groups. The intermingling of these institutions with the BURCCs and local administration, so that elder Out of School Children i.e., above 13 years of age can be admitted skilled and also employable or be an entrepreneur.

Dimensions of Impact on Inclusion of Corporate Social Responsibility in Providing Special Training

The policy is formulated to attain pre-determined goals and objectives. The outputs of a policy making process are the results which come through in the form of one policy or the other. Efforts to increase the level of literacy, health for all, better roads, effective delivery system, etc are the outputs of some of the policies. The outcome of these outputs is the impact of the policies.

Furthermore, only through the impact of the policy, it could be ascertained whether the policy is being implemented properly or not and what drawbacks or loopholes are there which need to be reconsidered or taken extra care of or required change to be brought in the policy statement or implementation. The importance of impact assessment is enormous and qualitative. The responsibility of the government does not come to an end merely by formulating and implementing the policy. It is all the more obligatory on the government to make sure the policy outputs have positive policy outcomes.

Corporates partnership with government, particularly at local level, can play a vital role in enabling the increased access to education. The various dimensions of Impact of Special Training of Out of School Children are as follows:

(i) Direct Impact

- Conduct of door to door survey by SMC members, volunteer from CSR and local authorities (PRIs and Municipal bodies) for identification of those children who are of the age 06 to 14 years and are not enrolled in the formal school.
- Identification of Out of school children.
- Assessment of children's knowledge and skills for the purpose of admission in age appropriate classes.

- Enrollment of Out of School Children (OoSC) in Special Training Centers.
- Mainstreaming of children in formal school according to their age appropriate classes.
- Monitoring their progress till successful completion of elementary education.

(ii) Indirect Impact

- Awareness among the parents/ guardian of Out of children about the importance of education.
- Sensitization among public about the issue, capacity building and training of teaching staff, School management Committee members, volunteers from CSR and NGOs for their active participation and role in the successful attainment of the goals.
- Opening and functioning of Special Training Centers in the government schools or by companies under CSR obligation.
- Devising Special Learning Support Material and its availability to the students.
- Conducting Capacity Building Training programs

(iii) Overall Impact

- Raise in quality of education, more and more children are educated at least at the level of elementary level.
- Decrease in child labour, raise in the standard of living of families those are under privileged.
- Overall development of society.

Conclusion

Elementary education is considered important not only because of constitutional obligation, but also as a crucial input for total development of children, particularly to build confidence among the them to deal with outsiders on equal terms. One important initiative in this direction has been initiated by the Government of India in the form of Special Training to Out of School Children, a provision under section-4 of RTE Act 2009.

The true essence and need of Right to Education Act is for those Children who are deprived and unreached by the School authorities and local bodies. It is a great opportunity for all of us to put in effort and bring those children who are deprived and disadvantaged to schools and help them to become a skilled and good citizen.

Keeping in view the complexity and significance of the Special Training and for its successful and impactful implementation, appraisal of role of companies under CSR obligation in education sector is very important. Their inclusion in government machinery starting from Local level to district level in School Management Committee, BURCC meetings, in preparation of SLSM, opening of Special Learning Centre (SLC) and participation in awareness campaign along with school teachers will definite prove to catalyst in realisation of goal as mandated under RTE Act.

Every individual should take a pledge to learn about the RTE and get at least one Out of School Children back into school.

References

Ahluwalia, SP., and Dais, HS. (2008), Education: Issues and Challenges, APH Publishing Corporation, Delhi.

Basu, DD., (2011), Introduction to the Constitution of India, Wadhwa Publication, Nagpur.

Global initiative on Out of School Children, South Asia Regional Study, (2014), UNICEF, Kathmandu.

Government of India, Ministry of Human Resource Development, "All India Survey of Out-of-School of Age 5 & in 6-13 years of age group (Feb-May 2009)", Social & Rural Research institute, on behalf of Department of School Education & Literacy.

Government of India, Ministry of Human Resource Development, "Sarva Shiksa Abhiyan – Framework for implementation" (Mar 2011), Department of School Education & Literacy.

Government of India, Ministry of Human Resource Development, "National Sample Survey of Estimation of Out of School Children in the age 06-13 in India", (2014) Social & Rural Research institute, on behalf of Department of School Education & Literacy.

Government of India, Ministry of Human Resource Development, (2007) "Out of School Children: The Abhiyan to bring them to School, SSA", New Delhi.

Government of India, Ministry of Statistics and Programme Implementation (2012), "Report on education in India: 2007-2008 participation and expenditure", National Sample Survey office, New Delhi.

Kakoli, B., and Sayeed, U., (2013), Educational progress in India in the context of Out of School Children, International Research Journal of Social Science, New Delhi.

Mehrotra, Santosh., Panchamuki, P.R., and Srivastava, Ravi., (2005), Universalising Elementary Education in India (Uncaging The Tiger Economy), Oxford Publication, New Delhi.

Panda, KC., (1999), Disadvantaged children: Theory, Research and Educational Perspective, Mittal Publications, New Delhi.

Pedersen, L., (2008), Primary education for deprived urban children in Kolkata – exclusionary factors and inclusive strategies, Institute for educational research, University of Oslo, Oslo.

Rao, Jaganath., (2010), Elementary Education in India: Status, Issues and Concerns, Viva books Pvt Ltd, New Delhi.

School Readiness: A Conceptual Framework, UNICEF, United Nations Children's Fund, New York-17.

Social Development Report - 2012, (2013), Council for Social Development, University Press, Oxford Publication, New Delhi.

Survey for assessment of dropout rates at elementary level in 21 states – Final report, (2013), TNS India Private Limited, Gurgoan.

Websites

www.mhrd.nic. in

www.ssa.nic.in/rtedocs/guidelinesforspecialtrainigunderrteact. pdf

www.dise.in

www.ssa.nic.in

www.neupa.org

www.uis.unseco.org

www.educationforallinindia.com

www.pwc.in/.../handbook-on-corporate-social-responsibility-in-india.pdf

www.unicef.in/Corporate-Sector-Can-Play-Important-Role-in-Achieving-RTE

Journal of Institute of Public Enterprise

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 143-156

Demistifying SDG 13 Through the Sustainability Balanced Scorecard

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Abstract

As our planet stands at the brink of climate calamity, United Nations' SDG 13 calls for urgent action to combat climate change and its impacts. India is committed by its five-pronged policy 'Panchamrith' to combat climate change. In alignment with the government policy it is imperative for entities to adopt climate change mitigation strategies. This article aims to highlight the adoption of Balanced Scorecard for addressing the sustainability issues of organizations as a commendable framework by incorporating environmental and social dimensions in its overall performance. The present article is an endeavor to advance comprehension of corporate sustainability strategy implementation. An attempt is made in this direction by examining the critical success factors essential for bridging the gap between strategy formulation and implementation. For organizations with clear sustainability vision, SBSC enables implementation of the strategy for desired performance. Objective of this paper is to explore and leverage the transformative potential of organizations to address the climate crisis. The present conceptual article seeks to investigate the effectiveness of sustainability balanced scorecard in aligning the goals related to climate action.

Keywords: SDG 13, Climate Action, Sustainability, Vision, Strategy Implementation, Sustainability Balanced Scorecard

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Introduction

The UN launched the Sustainable Development Goals (SDGs) in 2015 which comprises of a set of 17 global goals aimed at achieving them by 2030. The agenda includes 17 SDGs, which are associated with 169 targets, and progress is to be measured using 232 indicators (United Nations 2017).Through goals such as good health and wellbeing, clean water and sanitation, industry innovation and infrastructure, responsible consumption and production, climate action, affordable and clean energy, partnerships for the goals, the SDGs are aimed at transforming the world. The global goals are mainly focused on ending poverty, protecting the planet and ensuring prosperity for all" providing a holistic and multidimensional view on development (Sara Roversi 2020).

The UN's SDG 13 emphasizes on urgent action to combat climate change and its impacts. In the context of India, a nation grappling with environmental challenges amid economic growth, this article investigates the use of SBSC as an appropriate management tool for businesses to align with achievement of SDG 13.

The UN SDGs with particular emphasis on SDG 13

The UN SDGs are depicted in the below figure and SDG 13 is exclusively shown in the following figure**.** Essentially it is call for action to address global challenges and ensure sustainable development of the planet and all its inhabitants (Philip Purnell 2022). Hence in order to achieve the Agenda 2030 all are expected to make efforts in this direction particularly the corporates.

The UN SDGs for 2030

The basic aim of SDGs is to create an integrative agenda that includes environmental sustainability and social concerns with the agenda of eradication of poverty (Griggs et al.2013). SDG 13 is ‘climate action’ which urges to ‘ take urgent action to combat climate change and its impacts. Target 13.1 is ‘Strengthen resilience and adaptive capacity to climate – related hazards and natural disasters in all countries. Target 13.2 is ‘Integrate climate change measures into national policies, strategies and planning. Hence, SDG 13 calls for urgent action to tackle climate change. Researchers and policy makers have set a goal of limiting global warming to 1.5°C above pre-industrial levels. We are only 0.4°C from that mark.

UN’s SDG 13

As per the World Bank, on an average each person accounts for 6.2 tonnes of CO_2 emissions.

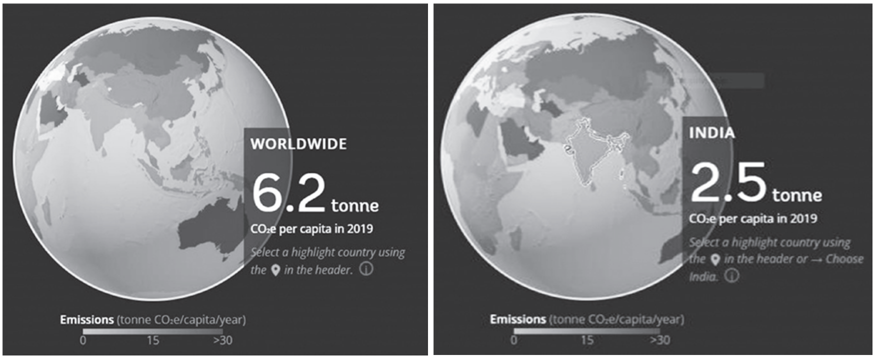
In many developed nations the number is almost three times greater. India’s per person CO_2 emissions are at 2.5 tonnes as shown below in the Figure-2 which is comparatively lesser than other nations of the world. It is worth noting that according to UN estimates, India has become the most populous country surpassing China with over 1.4 billion people at the end of April 2023. The following table shows CO_2 emissions on an average each person worldwide and select countries.

Carbon Emissions Per Capita Worldwide and Country-wise (tone CO_2/capita/year) in 2019

S. No.	Particulars	CO_2 Emissions Per Capita in Tonnes Per Year (Year 2019)
1	Worldwide	6.2
2	India	2.5
3	UK	6.6

S. No.	Particulars	CO_2 Emissions Per Capita in Tonnes Per Year (Year 2019)
4	Germany	9
5	China	9
6	Russian Federation	17.2
7	US	18.3
8	Canada	19.6
9	Saudi Arabia	20.2
10	Australia	23.1

World Bank: Average CO_2 Emissions Per Person - Worldwide and India



Although climate change is a real threat to our entire civilization, through necessary infrastructural changes we can protect our planet. These in turn provide huge opportunities to businesses which can pave the way for prosperity across the globe. European countries are in the forefront of energy transitions. Their energy efficiency has considerably improved, enhancement in solar capacity and there has been steep rise in electric car sales. It is evident that Europe has taken up the energy crisis as an opportunity for transition to clean energy.

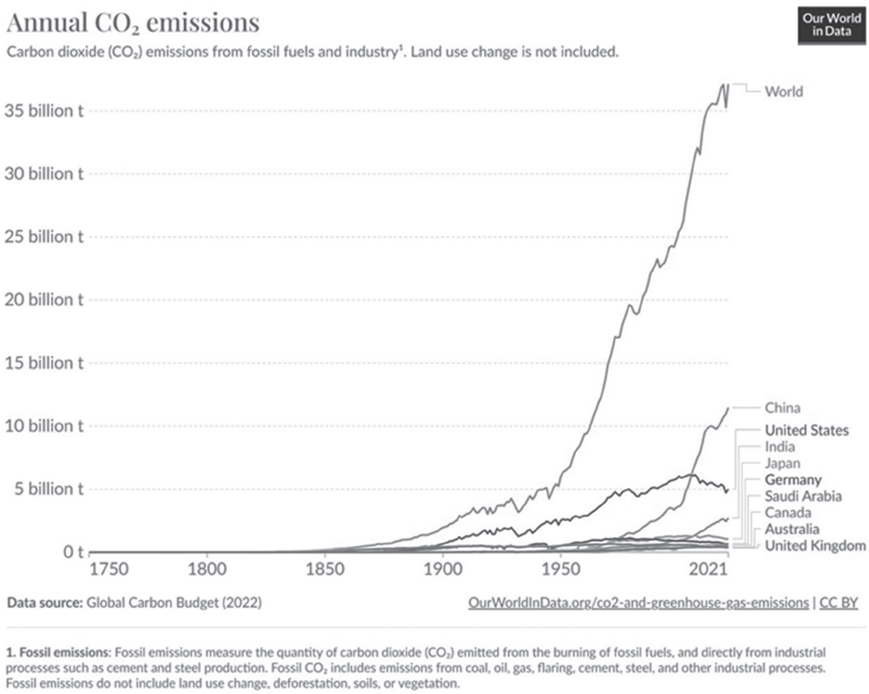
India is still in the early stages of its sustainability journey in achieving the SDG 13. However,

GOI has been keen in its efforts towards climate action. India presented its five nector elements called Panchamrit of India's climate action at the COP 26 held in Glasgow, US which are as below (pib.gov.in):

- Reach non-fossil energy capacity by 2030.
- 50 per cent of its energy requirements from renewable energy by 2030.
- Reduction of total projected carbon emissions by one billion tones till 2030.
- Reduction of carbon intensity of the economy by 45 per cent by 2030.
- Achieving the target of net zero by 2070.

Objective of this paper is to explore and leverage the transformative potential of organizations to address the climate crisis. The present conceptual article seeks to investigate the effectiveness of sustainability balanced scorecard in aligning the goals related to climate action. The present study seeks to offer valuable insights for improving corporate strategies for sustainable performance of businesses thereby attaining competitive edge. Sustainability is far beyond the point of being merely an attribute that companies use to build their image or influence public opinion, it is a non-optional choice for companies to become sustainable themselves (Erica Kostense Smit 2018).

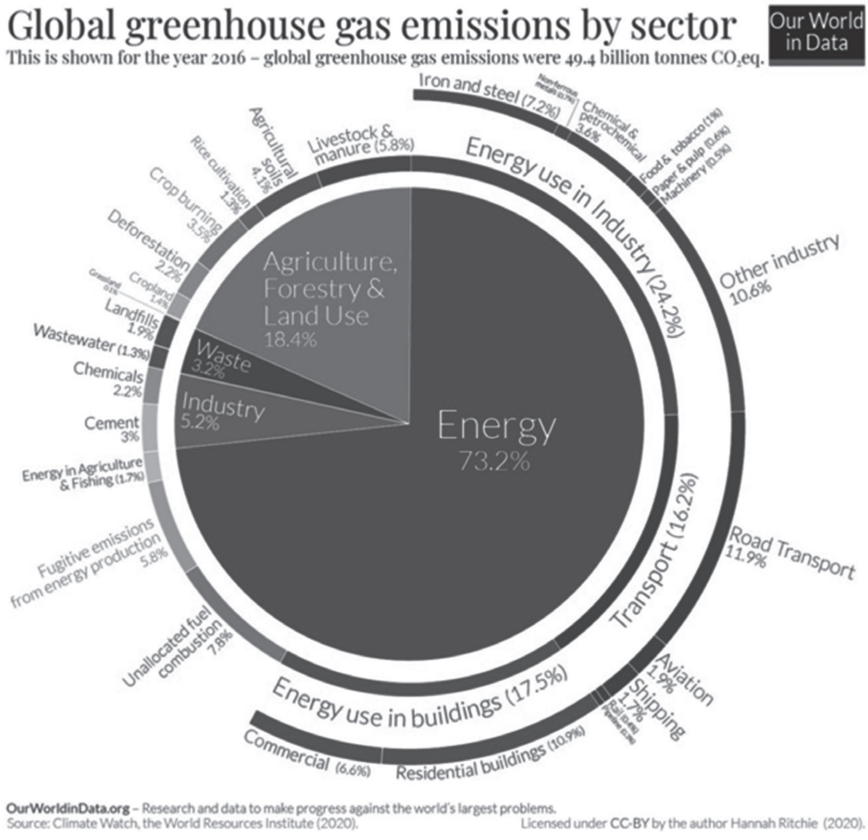
Annual Carbon Emissions by country is shown in the following figure. As per International Energy Agency, there was a 6 per cent increase in global energy – related carbon dioxide emissions in 2021 reaching an all time high of 36.3 billion tones. The figure has been steeply increasing thereafter. The annual CO_2 emissions of select countries are also shown in the following figure.



Source: ourworldindata.org

So it is evident that around fifty billion tonnes of green house gas is emitted globally. The breakdown of emission by sector can be known from the following pie chart in the following figure and the table**.** It is clear from the diagram and the table that three fourth of the emissions come from the energy sector and there is no easy fix for this issue. Even if we manage to completely eliminate carbon from electricity generation the problem still persists for heating and road transportation. Moreover low carbon technologies for shipping and aviation sectors are yet to be dealt with. Hence, there exists no single solution for reaching net zero. Innovation across sectors are needed (Hannah Ritchie 2020).

Global GHG Emissions by Sector



Source: OurWorldinData

The Global Carbon Emissions by Sector

Sector	Global carbon emission share
73.2%	Energy Use
18.4%	Agriculture, Forestry & Land Use
5.2%	Industrial Processes
3.2%	Waste

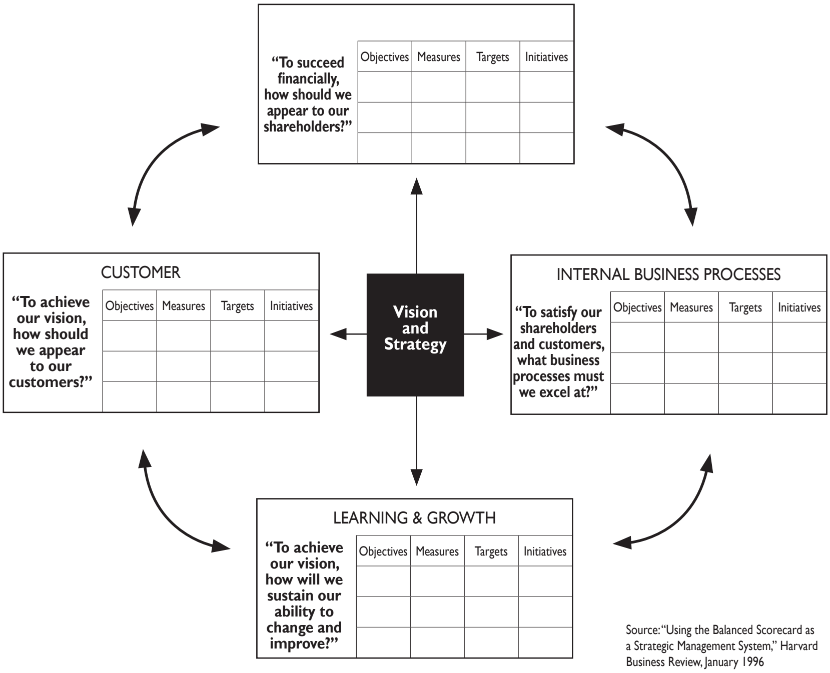
Source: Iman Ghosh 2020, visualcapitalist.com

The Balanced Scorecard

The Balanced Scorecard was introduced by Robert S. Kaplan and David P. Norton in a 1992 Harvard Business Review article with the title, "The Balanced Scorecard: Measures that Drive Performance."

Kaplan and Norton further elaborated on this concept in their subsequent book "The Balanced Scorecard: Translating Strategy into Action," which was published in 1996. It provides a detailed guide on how organizations can use the BSC to translate their strategic goals into actionable measures and monitor performance effectively. The initial BSC framework is shown in the below figure**.**

The Balanced Scorecard (Kaplan and Norton 1996a, p.9)



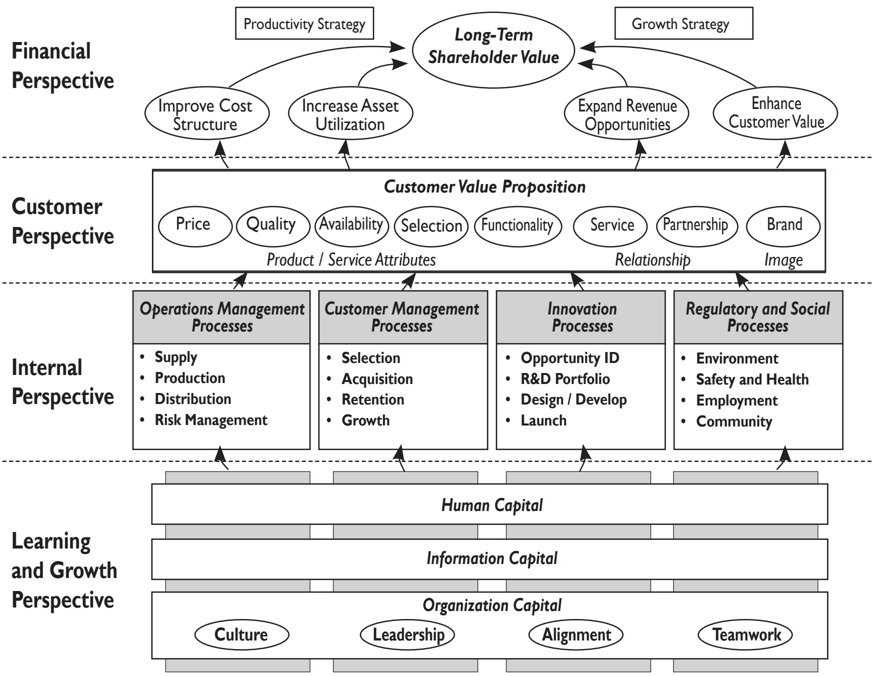
Source: "Using the Balanced Scorecard as a Strategic Management System," Harvard Business Review, January 1996

Kaplan and Norton emphasize the importance of creating a strategy-focused organization to thrive in a dynamic business environment (Kaplan and Norton 2000). They expanded on the BSC framework and discussed how organizations can align their strategic objectives with day-to-day operations. "Alignment: Using the Balanced Scorecard to Create Corporate Synergies" (2006):

In their book published in 2006, Kaplan and Norton delve into the concept of alignment, emphasizing the importance of aligning various levels and units within an organization to achieve overall strategic objectives. They provide insights into using the BSC as a tool for creating synergies and ensuring that different parts of the organization work cohesively towards common goals.

Kaplan and Norton introduced the idea of "strategy maps" in their publishing "Strategy Maps: Converting Intangible Assets into Tangible Outcomes" (2004), as a complement to the BSC. A strategy map as shown in the Figure-6 visually represents the cause-and-effect relationships between various strategic objectives. It helps organizations to articulate and communicate their strategy more effectively. Their book titled "The Execution Premium: Linking Strategy to Operations for Competitive Advantage" (2008), focuses on the practical aspects of strategy execution. Kaplan and Norton explore how organizations can link their strategic objectives to day-to-day operations, emphasizing the need for effective execution to gain a competitive advantage. They discuss the role of the BSC in achieving this link between strategy and operations.

The Balanced Scorecard and Strategy Map (Kaplan and Norton 2004) The Sustainability Balanced Scorecard:



Sustainability goals are often broad and to assess performance, organizations must focus on specific issues or areas of priority. To effectively execute strategies in general and particularly those related to sustainability managers need a thorough understanding (Epstein and Roy 2001). The Balanced Scorecard as a strategic management tool is utilized by organizations to monitor and evaluate their performance across the different perspectives comprising of financial, customer, internal business process and learning and growth dimensions. The evolution of this concept extends to the framework of Sustainability Balanced Scorecard which incorporates sustainability considerations into an organizations strategic management and performance management system.

This enhancement acknowledges the imperative of integrating environmental, social and economic factors into the core aspect of the strategy of the company. The SBSC with the additional perspective emphasizes the importance of sustainable practices and their impact on the overall performance of the organization. In consequence, organizations aim to align their strategies with the commitment to environmental and social responsibility, ensuring the fact that sustainability is an integral part of their business objectives and in their performance evaluation criteria.

A firm that intends to embed CSR and sustainability into practice needs to use managerial mechanisms to influence worker's behavior and to align individual objectives with company's goals and strategies (Dixon, Nanni & Vollmann, 1990). Giving attention to social issues and stakeholders' interests, in fact, improves the firm legitimization and its reputation, strengthens the consensus from stakeholders, generates intangible assets and reduces the firm's risk profile (Wartick & Cochran, 1985; Wood, 1991; Godfrey, 2005; Mackey et al., 2007).Coda (1988, 2004) proposed that financial, competitive and social goals are not rival; the relationship among them is circular because each dimension influences reciprocally the other ones. Starting from the beginning of '90s, some scholars highlighted the importance of having specific managerial tools devoted to measure and represent the sustainable performance, deployed into both the environmental and the social perspectives (Epstein, 1995; Schaltegger et al.,1996; Elkington, 1997; Epstein & Manzoni, 2006). All such frameworks are multi-level and multi-stakeholder. Hence, for organizations with clear sustainability vision, SBSC enables implementation of the strategy for desired performance.

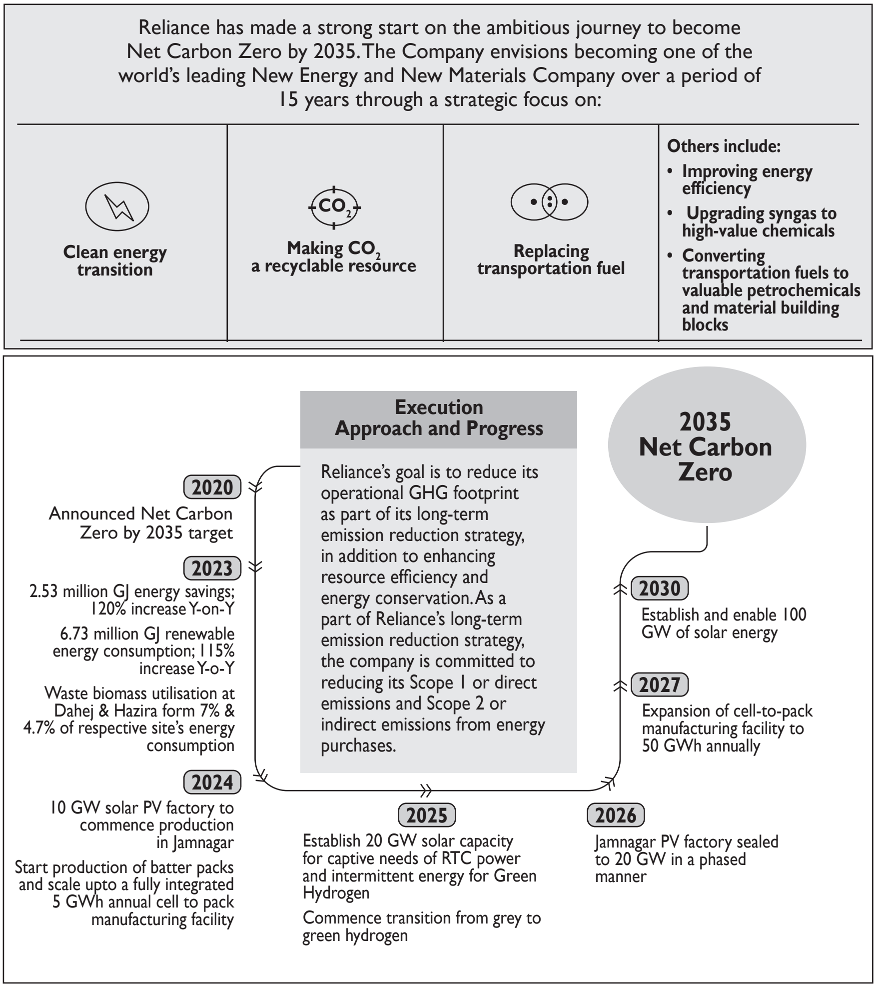
Case Studies of Top Indian Companies

As stated the objective is to highlight that there lay huge potential for businesses in addressing the climate crisis by aligning the vision of the company to SDG 13. Companies which have been proactive in pioneering the efforts on sustainability have proved to be at the edge of competition in their respective industry. To quote examples of Indian companies which are on track of sustainability journey are Reliance Industries Ltd and Infosys.

RIL in its annual report 2022-23 on value created for stakeholders states that it has contributed.

Rs.1,77,173 crores to the national exchequer thereby claiming as one of the highest contributors to India's economic growth (Integrated Annual Report 2022-23 Pg 163).It disclosed its net zero road map as shown below:

RIL's Net Carbon Zero Target is Set As 2035



RIL is in pursuit of building a robust business model that can catch the irreversible upward curve in the demand for clean and renewable energy in India and globally with downward curve in the cost of their production. The company in its Integrated Report 2023 report states that overall the company remains committed to pursuing a balanced and sustainable approach to value creation, with focus on the wellbeing of its stakeholders, including employees, customers, the wider community and the environment. In the case of RIL, the management's vision to drive sustainability has been exceptional since its inception and has been implemented with great vigor (Singhania & Saini 2022).

Infosys as a company claims to understand the reward of sustainability in the first place. The company began its journey in 2008 and became carbon neutral in the year 2020, which is 30 years ahead of the time line set by the Paris Agreement. As per the Infosys ESG Radar of 2023, it was found that companies must radically transform their approach to ESG integration. The company's survey of 2,500 executives showed that these ESG initiatives add value but many companies still fall short. The report appeals that companies should act now and not wait for ESG to pay off in the future. The report states that 90% of the respondents have affirmed the ESG initiatives show positive financial returns.

This can be seen from the following table.

Financial Returns for ESG Initiatives

S. No.	Particulars	Percentage	Combined %
1	Significant Positive Returns	29%	90%
2	Moderate Positive Returns	61%	
3	No Noticeable Returns	10%	
4	Negative Returns	0%	

As per the above table of the Infosys ESG Radar 2023, report a whopping 90% of the executives affirm that ESG initiatives show positive financial returns. Even then, companies tend to anchor more on brand benefits than on other financial outcomes. Infosys goes to the extent of stating ESG as the new backbone of business in their report.

Companies are likely of tracking environmental metrics more compared to those of social and governance. This is shown in the following table.

Track of ESG Metrics in Percentage Conclusion

S. No.	Particulars	Percent-age	E/S/G
1	Waste water Recycling	73%	E
2	Carbon Footprint	70%	E
3	Training by Gender	60%	S
4	Water Use	60%	E
5	Cyber security incidents	59%	G
6	Percent of workforce trained on cyber security policies	58%	G
7	Waste entering landfills	57%	E
8	Employee satisfaction	57%	S
9	Community investment	56%	S
10	Percent of workforce that is women	56%	S
11	Percent of accessibility compliant digital assets	54%	S
12	Annual confirmed corruption incidents	54%	G
13	Participation rate of employee satisfaction surveys	53%	S
14	Percentage of workforce trained on anti- corruption policies	53%	G
15	Employee recourse group participation	52%	S
16	Employees trained or reskilled	51%	S
17	LGBTQIA+ inclusion	47%	S

Track of ESG Metrics

- Environmental (E)
- Social (S)
- Governance (G)

Presently the climate disclosures made by companies fall short of the expectations of investors, regulators and other stakeholders. Moreover the disclosures are not expediating the process of decarbonization. Efforts to reduce emission need to gain traction. The best chance for a sustainable future lies in net zero. Academia, industry and government must work in unison towards accelerating actions that directly impact the move towards net zero. Collaborative action research is the need of the hour. The purpose is to develop effective, legitimate and resilient governance arrangements for climate adapatation (Patrick Huntjens 2015).The first three agenda priorities for the G20 dialogue put forth by G20 India in 2023 relate to environmental and social aspects of ESG. In conclusion it is important to mention about sharing of an open letter by alliance of CEO Climate Leaders to world leaders for COP 28 on the appeal for policy changes that can drive outsized impact towards making meaningful contribution towards global climate goals in addition to driving sustainable value. It is expected that the energy transition alone is expected to create an additional 51 million jobs by 2030.

As per Dr. Sultan Ahmed Al Jaber COP 28 President – Designate UAE Special Envoy for Climate Change in his message on COP 28, stated to unleash the power of 'finance' which is a critical enabler of climate action, climate finance must be made affordable, available and accessible to developing countries. To achieve the goals of the Paris Agreement, emerging and developing nations require in excess of USD 2.4 trillion of annual investment in climate action by 2030. Transformation in climate finance arrangements is needed to deliver at this scale, for working better as a system and support finance mobilization channeled to developing countries at exceptional levels. Hopes are held high on COP28 which launched the historic loss and damage fund on the very first day of its inauguration after a year of negotiation. Finally it can be stated that SBSC can prove to be a promising framework for accelerating sustainability efforts by organizations striving for a positive and impactful transformation.

References

Dixon, J. R., Nanni, A. J. (Jr.), & Vollmann, T. E. (1990). The New Performance Challenge: Measuring Operations for World-class Competition. Dow Jones-Irwin.

Elkington, J. (1996). Cannibals with Forks: The Triple Bottom Line of 21st Century Business.

Epstein, M. (1995). Measuring Corporate Environmental Performance: Best Practices for Costing and Managing an Effective Environmental Strategy. (1st ed.).

Epstein, M. J., & Manzoni, J. F. (2006). Performance Measurement and Management Control, Volume 16: Improving Organizations and Society. Emerald Group Publishing.

Epstein, M. J., Rejc Buhovac, A., & Elkington, J. (2017). Making Sustainability Work: Best Practices in Managing and Measuring Corporate Social, Environmental, and Economic Impacts. DOI: 10.4324/9781351276443.

Epstein, M. J., & Roy, M-J. (2001). Sustainability in Action: Identifying and Measuring the Key Performance Drivers. Long Range Planning, 34(5), 585-604.

Godfrey, P. C. (2005). The Relationship between Corporate Philanthropy and Shareholder Wealth: A Risk Management Perspective. The Academy of Management Review, 30(4), 777798.

Griggs, D., Stafford-Smith, M., Gaffney, O., Rockström, J., Öhman, M. C., Shyamsundar, P., Steffen, W., Glaser, G., Kanie, N., & Noble, I. (2013). Sustainable development goals for people and planet. *Nature*, 495(7441), 305-307.

Infosys ESG Radar 2023. https://www.infosys.com/about/esg/insights/esg-radar-report.html

Iman Ghosh (2021) Our World in Data. A Global Breakdown of Greenhouse Gas Emissions by Sector 2021. Retrieved November 30, 2023, from [https://www.visualcapitalist.com/cp/aglobal-breakdown-of-greenhouse-gas-emissions-by-sector/]

Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard – Measures that Drive Performance. Harvard Business Review, January-February.

Kaplan, R. S., & Norton, D. P. (1996). Strategic Learning & the Balanced Scorecard. Strategy & Leadership. volume number(issue number), page range. DOI or URL if available.

Kaplan, R. S., & Norton, D. P. (2000). Having Trouble with Your Strategy? Then Map It. Harvard Business Review, September-October.

Kaplan, R. S., & Norton, D. P. (2006). Using the Balanced Scorecard to Create Corporate Synergies. Harvard Business Press.

Kaplan, R. S., & Norton, D. P. (2004, February 01). Measuring the Strategic Readiness of Intangible Assets.

Kaplan, R. S., & Norton, D. P. (2008, January). Mastering the Management System. Harvard Business Review.

Kostense Smith, E. (2018). Sustainable Development Goals: A business perspective. Deloitte.

Purnell, P. J. (2022). A comparison of different methods of identifying publications related to the United Nations Sustainable Development Goals: Case Study of SDG 13 – Climate Action.

Reliance Industries Limited. (2023). Integrated Annual Report 2022-23. Reliance Industries Limited. https://www.ril.com/ar2022-23/pdf/RIL-Integrated-Annual-Report-2022-23.pdf

Ritchie, H., Roser, M., & Rosado, P. (2020). CO_2 and Greenhouse Gas Emissions. Retrieved November 30, 2023, from https://ourworldindata.org/co2-and-other-greenhouse-gasemissions.

Roversi, S., Laricchia, C., & Lombardi, M. (2020). Sustainable Development Goals and Agrofood System: The Case Study of the Future Food Institute.

Singhania, M., & Saini, N. (2021). Systems Approach to Environment, Social and Governance (ESG): Case of Reliance Industries. Sustainable Operations and Computers, 3(4), Article e0123456. https://doi.org/10.1016/j.susoc.2021.11.003

UNFCCC. (2023, October 17). Letter from the President-Designate of COP28/CMP18/CMA5, and UAE Special Envoy for Climate Change. Notifications to Parties and Observers. Review, Analysis and Consideration of Progress.

United Nations. (n.d.). Sustainable Development Goals. Retrieved November 30, 2023, from https://sdgs.un.org/goals

Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate Social Responsibility and Firm Performance: Investor Preferences and Corporate Strategies. Academy of Management Review, 32(3), Article DOI: 10.5465/AMR.2007.25275676.

Wartick, S. L., & Cochran, P. L. (1985). The Evolution of the Corporate Social Performance Model. The Academy of Management Review, 10(4), 758-769.

Wood, D. I. (1991). Corporate Social Performance Revisited. Academy of Management Review, 16(4), 691-718.

https://en.wikipedia.org/wiki/2023_G20_New_Delhi_summit

https://unfccc.int/documents/632560?gclid=Cj0KCQ iAgqGrBhDtARIsAM5s0_ktbLPV635A WsEQA_ ZJ4J93Yb97rltLBbbrZCOxAfKuSEBt1QlvXPwaAovgEALw_wcB

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 157-172

Analysing the Impact of Environmental, Social, and Governance Performance on Indian Stock Market Entities

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Abstract

This report delves into the ESG performance evaluation of fifteen Indian companies spanning the FMCG, Healthcare, Metal, Power and Energy, and IT sectors. The assessment of ESG performance employed data from diverse sources, including annual reports, websites, and sustainability reports. The analysis focused on three key ESG dimensions:

- Environmental: This dimension gauges the company's environmental impact, encompassing factors like greenhouse gas emissions, water usage, and waste generation.
- Social: This dimension assesses the company's societal impact, including considerations of labour practices, human rights records, and community engagement.
- Governance: This dimension scrutinizes the company's corporate governance practices, such as board structure, risk management, and disclosure policies.

The ESG performance of a company can significantly influence its long-term financial outlook. Companies exhibiting robust ESG performance are less susceptible to environmental and social risks, making them more appealing to customers and employees. Moreover, they demonstrate greater resilience to shocks and stresses, contributing positively to society.

The report concludes with a discussion if the ESG is helpful to take the Investment decision or not with respect to their return.

Keywords: Environmental, Return on Investment, Social and Governance, Sustainability

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Introduction

Background

Environmental, social, and governance (ESG) have become increasingly crucial considerations for investors, policymakers, and various stakeholders. Companies that exhibit robust ESG performance are less susceptible to environmental and social risks, making them more appealing to both customers and employees. Additionally, these companies are better equipped to withstand shocks and stresses, contributing positively to society.

In recent times, there has been a rising inclination towards ESG integration, denoting the practice of factoring ESG elements into investment decisions. This shift is propelled by various factors, including heightened awareness of the significance of ESG factors, a growing demand for sustainable investments, and the increased accessibility of ESG data and metrics.

Objectives

This project aims to evaluate the ESG performance of fifteen Indian companies operating in the FMCG, Healthcare, Metal, Power and Energy, and IT sectors. The companies under consideration include Varun Beverages Ltd, ITC Ltd, Radico Khaitan Ltd, Zydus Lifesciences Limited, Max Healthcare Institute Limited, Glenmark Pharmaceuticals Limited, TATA Steel Ltd, Jindal Stainless Ltd, Jindal Steel & Power Limited, Bharat Petrolium corp. Ltd, Tata Power Ltd, Adani Green, LTIMindtree Ltd, Tech Mahindra Ltd, and WIPRO Ltd.

The specific goals of the project include:

- Identifying the key ESG factors relevant to the fifteen companies.
- Evaluating the ESG performance of each of the fifteen companies across the three dimensions: environmental, social, and governance.
- Identifying the strengths and weaknesses in the ESG performance of each company.
- Formulating recommendations to enhance the ESG performance of each company.

Importance of Integration ESG Factors

The growing importance of Integration ESG factors in business operations can be attributed to several key reasons.

First, ESG factors significantly influence the long-term financial performance of companies. For instance, companies with poor environmental practices are more likely to face regulatory challenges and increased costs. Those with weak social performance may experience higher employee turnover and customer backlash, while companies with governance issues are at a higher risk of being involved in corruption scandals and financial fraud.

Second, incorporating ESG factors into decision-making helps companies attract and retain both customers and employees. More and more consumers and workers are actively seeking companies committed to sustainability and social responsibility. Integrating ESG factors allows companies to showcase their dedication to these values, making it easier to attract and keep top talent.

Third, the integration of ESG factors aids companies in identifying and addressing risks, such as those related to climate change, water scarcity, and social unrest. This proactive approach also enhances their ability to withstand economic downturns and natural disasters.

Methodology

This study employs a comprehensive approach to evaluate the ESG performance of fifteen companies across the FMCG, healthcare, and steel sectors. Data is sourced from Bloomberg. The analysis involves assessing the companies' environmental impact, social practices, and corporate governance. Financial indicators are also considered to understand the interplay between ESG and financial performance.

The subsequent chapters of this report delve into the literature surrounding ESG integration, detail the methodology, present the analysis of selected companies in the portfolio performance and discuss the implications of the findings. This study contributes to the growing body of knowledge on the role of ESG factors in shaping investment decisions and fostering sustainable business practices.

Literature Review

ESG Factors and Integration Overview

ESG factors, encompassing environmental, social, and governance considerations, wield a substantial influence on the enduring financial performance of companies. ESG integration involves the incorporation of these factors into investment decisions. This integration can manifest through various approaches, including screening companies based on their ESG performance, actively engaging with companies to enhance their ESG performance, or investing in funds specifically focused on ESG.

Existing Research on ESG Integration

A growing body of research delves into ESG integration within investment decision-making. This body of work scrutinizes diverse theories, models, frameworks, and methodologies employed to investigate ESG integration. Additionally, it explores the primary findings, identifies gaps, and outlines limitations observed in previous studies.

- Some of the main theories that have been used to study ESG integration include: Stakeholder theory, which argues that companies should consider the interests of all their stakeholders, including their employees, customers, suppliers, and the environment: (Aldowaish, A., Kokuryo, J., Almazyad, O., & Goi, H. C. (2022). Environmental, Social, and Governance Integration into the Business Model: *Sustainability (Switzerland)*, *14*(5), [2959]. https://doi.org/10.3390/su14052959)
- **Agency theory**, which argues that there is a conflict of interest between managers and shareholders, and that managers should be incentivized to act in the best interests of shareholders. (Humanities and Social Sciences Communications | (2023) 10:410 | https://doi.org/10.1057/s41599-023-01919-0)

Several prominent models have been employed in examining ESG integration, including:

Triple Bottom Line Model – This model advocates for companies to assess their performance based not solely on financial metrics but also on environmental and social metrics. It emphasizes a holistic evaluation of a company's impact, considering economic, environmental, and social aspects.

Balanced Scorecard Model – The Balanced Scorecard model functions as a performance management framework featuring four key perspectives: financial, customer, internal business processes, and learning and growth. By considering these multiple dimensions, the model provides a comprehensive view of a company's overall performance beyond financial indicators.

(Aldowaish, A., Kokuryo, J., Almazyad, O., & Goi, H. C. (2022). Environmental, Social, and Governance Integration into the Business Model: *Sustainability (Switzerland)*, *14*(5), [2959]. https://doi.org/10.3390/su14052959)

Key findings from existing research underscore the positive impact of ESG integration on companies, facilitating the attraction and retention of customers and employees, mitigating risks, and enhancing overall resilience. However, the process is acknowledged as complex, marked by challenges such as inconsistent ESG data, high research costs, and limited investor demand for ESG-focused funds.

Despite these insights, gaps persist in the research landscape. Further exploration is needed to understand the long-term relationship between ESG performance and financial outcomes, the differential impact on various company types, and the challenges and opportunities across different countries and regions. Additionally, the role of ESG ratings and scores in influencing investment decision-making remains an area requiring more in-depth investigation.

Various methodologies have been employed to study ESG integration, encompassing surveys that capture the attitudes of investors and stakeholders, interviews providing deeper insights into challenges and opportunities, case studies examining individual company experiences, and quantitative analyses testing the relationship between ESG and financial performance.

Findings

Key findings from existing research underscore the positive impact of ESG integration on companies, facilitating the attraction and retention of customers and employees, mitigating risks, and enhancing overall resilience. However, the process is acknowledged as complex, marked by challenges such as inconsistent ESG data, high research costs, and limited investor demand for ESG-focused funds.

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Challenges and Opportunities in ESG Integration

ESG integration presents both challenges and opportunities.

On the challenging side, there is a lack of consistent ESG data and metrics, resulting in the absence of a universally agreed-upon set. This discrepancy makes it challenging to effectively compare the ESG performance of diverse companies. Additionally, the cost of ESG research is notably high, particularly for smaller investors, posing a financial hurdle. Furthermore, there remains a deficiency in investor demand for ESG-focused funds, complicating access to such investments.

Conversely, opportunities in ESG integration include the escalating demand for sustainable investments. Investors are increasingly seeking sustainable options, driven by heightened awareness of the environmental and social impacts of companies, the expanding availability of ESG data and metrics, and the proliferation of ESG-focused funds. Furthermore, the growing accessibility of ESG data and metrics simplifies the task of comparing the ESG performance of different companies. The increasing number of ESG-focused funds further facilitates investor access to ESG investments.

The Role of ESG Ratings and Scores

Investors increasingly rely on ESG ratings and scores to evaluate companies' ESG performance. Typically, third-party organizations assign ESG ratings, while companies themselves calculate ESG scores.

While ESG ratings and scores can serve as valuable tools for investors, exercising caution is essential. Their subjectivity and susceptibility to the methodologies employed by rating agencies highlight the need for a careful approach. It is crucial to grasp the limitations of ESG ratings and scores before incorporating them into investment decisions.

Key limitations include the subjectivity of ESG ratings and scores, influenced by the methodologies used by rating agencies. Additionally, a lack of transparency in the methodologies employed by ESG rating agencies poses challenges for investors seeking to understand the calculation process. Furthermore, the lack of comparability across different companies arises from variations in methodologies and data sources used to determine ESG scores.

Despite these constraints, ESG ratings and scores remain valuable tools for investors. However, a cautious approach, coupled with an understanding of their limitations, is imperative.

Impact of ESG performance

ESG factors are environmental, social and governance that measure the sustainability and ethical impact can influence the financial performance, risk profile, valuation, reputation, and stakeholder relations of a company or a sector. Following are the significance of ESG factors for investor.

- Identifying opportunities and threats that a company or sector faces based on its sustainability and ethical performance.
- Evaluating the long-term viability and resilience of a company or sector by considering its ability to manage ESG risks and leverage ESG opportunities.
- Aligning investment objectives and values with the social and environmental goals of a company or sector.
- Improving portfolio diversification, returns, and risk-adjusted performance by integrating ESG factors into investment analysis and selection.

ESG factors can be categorized into three primary groups: environmental, social, and governance.

Environmental factors encompass the impact of a company or sector on the natural environment, including:

- Climate change: Contribution to or mitigation of greenhouse gas emissions, carbon footprint, use of renewable energy, etc.
- Resource efficiency: Management of natural resources like water, land, minerals, waste generation, recycling, etc.
- Pollution: Prevention or reduction of air, water, soil, noise pollution, environmental compliance, fines, penalties, etc.

- Biodiversity: Protection or enhancement of ecosystems, habitats, species, environmental stewardship, conservation, restoration, etc.

Social factors pertain to the impact of a company or sector on society, such as:

- Human rights: Respect for or violation of human rights standards, including labor rights, health and safety rights, privacy rights, human rights policies, practices, audits, etc.
- Social impact: Contribution to or mitigation of social issues like poverty, inequality, education, health, social responsibility, philanthropy, community engagement, etc.
- Employee relations: Treatment or satisfaction of employees, including diversity, inclusion, equity, compensation, benefits, training, development, retention, employee engagement, feedback, culture, etc.
- Customer relations: Satisfaction or loyalty of customers, including quality, safety, reliability, affordability, accessibility, customer service, feedback, complaints, etc.

Governance factors relate to the impact of a company or sector on governance structure and practices, such as:

- Board structure: Composition and effectiveness of the board of directors, including size, diversity, independence, expertise, tenure, board roles, responsibilities, committees, etc.
- Executive compensation: Alignment and transparency of executive compensation with company or sector performance and goals, including salary, bonus, stock options, incentives, executive evaluation, and accountability.
- Shareholder rights: Protection and empowerment of company or sector shareholders, including voting rights, proxy access, dividend policy, shareholder engagement, feedback, activism, etc.
- Ethics and compliance: Adherence to or violation of ethical and legal standards, including anti-corruption, anti-money laundering, anti-trust, ethics and compliance policies, practices, audits, etc.

ESG Scores and Metrics

ESG performance is assessed through scores and metrics, which can be either numerical or qualitative measures gauging a company's or sector's adherence to various environmental, social, and governance (ESG) factors. In this analysis, we aim to explore the relationship between ESG and financial metrics, investigating whether ESG factors impact the financial performance of companies. Additionally, we will conduct a cross-sector comparison of ESG performance, identifying both top and bottom performers.

ESG scores and metrics are derived from diverse sources, including company reports, industry databases, academic journals, and external frameworks. The variation in ESG scores and metrics arises from differences in methodologies, criteria, and weightings employed by various rating platforms or frameworks. Prominent examples of ESG rating platforms include MSCI, Sustainalytics, Refinitiv, and Bloomberg, while common ESG reporting frameworks comprise GRI, SASB, PRI, and TCFD.

For this study, we will utilize the ESG scores and metrics provided by Bloomberg for our sample companies. Bloomberg offers four types of ESG scores: environmental score, social score, governance score, and total ESG score. The environmental score assesses a company's performance in areas such as greenhouse gas emissions, energy efficiency, waste management, water use, and biodiversity impact. The social score evaluates performance in labor relations, human rights, health and safety, product quality, customer satisfaction, and community engagement. The governance score examines performance in board structure, executive compensation, shareholder rights, business ethics, and anti-corruption policies.

To facilitate a comparative analysis of ESG performance across companies and sectors, we will refer to the tabular data below, presenting the ESG scores and metrics for each entity.

ESG Scores and Metrics for Each Company and Sector for the FY 2022

(Date taken from Bloomberg where Rating prepared on 1-10 Score where 1 is the lowest and 10 highest)

Sector	Company Name	Environmental Score	Social Score	Governance Score	Total ESG Score
FMCG	Varun Beverages Ltd	1.55	2.07	4.39	2.46
FMCG	ITC ltd.	2.22	3.04	5.66	3.74
FMCG	Dabur India Ltd	4.45	3.99	4.96	4.46
HEALTHCARE	Zydus Lifesciences Limited	3.50	1.42	4.24	2.47
HEALTHCARE	Max Healthcare Institute Limited	3.94	1.21	4.97	2.69
HEALTHCARE	Glenmark Pharmaceuticals Limited	5.55	1.27	4.30	2.57
STEEL	TATA Steel Ltd	3.85	3.68	5.05	4.16
STEEL	Jindal Stainless Ltd	4.03	4.47	5.08	4.43
STEEL	Jindal Steel & Power Limited	1.79	2.52	6.28	3.08
Power and Energy	Bharat Petro Corp. Ltd	5.50	4.66	4.35	4.94
Power and Energy	Tata Power Ltd	3.73	5.34	5.48	4.62
Power and Energy	Adani Green Ltd	5.36	4.65	5.06	5.08
IT	LTIMindtree Ltd	5.45	3.35	5.32	4.53
IT	Tech Mahindra Ltd	5.22	3.25	5.74	4.53
IT	WIPRO Ltd	4.68	2.85	6.96	4.51

Analyzing the information provided in the table along with a detailed examination of the sub-factors within the ESG framework leads to the following conclusions:

1. Varun Beverages Ltd.
   - Overall ESG Score: 2.46 (Moderate)
   - Falls below the Non-Alcoholic Beverages sector median.
   - Significant room for improvement in sustainability and corporate responsibility.
   - Environmental performance is a concern, particularly in areas such as water and energy consumption, waste generation, and vehicle emissions.
   - Governance practices are moderate, while social responsibility needs enhancement, with potential benefits from increased investments in diversity, community engagement, and stronger environmental initiatives.
2. ITC Ltd.
   - Overall ESG Score: 3.74
   - Falls short of the Consumer Staples sector median.
   - Strong governance practices (5.66), but environmental performance can be improved.
   - Social responsibility initiatives are promising but could benefit from increased investments in community development and sustainable livelihoods.
3. Dabur India Ltd.
   - Overall ESG Score: 4.46 (Moderate)
   - Falls below the Consumer Staples sector median.
   - Strong governance (4.96) and environmental sustainability (4.45).
   - Room for improvement in social responsibility, with key areas including education, healthcare, and sustainable agriculture practices.
4. Zydus Lifesciences Limited
   - Overall ESG Score: 24.7 (Impressive)
   - Shines as a leader in sustainability and corporate responsibility within Biotechnology & Pharmaceuticals.
   - Scores surpass the sector median, highlighting commitment to environmental and social responsibility.
   - Governance score (33.33) is moderate with room for improvement.

1. Max Healthcare Institute Limited
   - Overall ESG Score: 3.26
   - Falls short of the Healthcare sector median.
   - High governance score (4.97) and moderate environmental performance (3.94).
   - Significant improvement needed in social responsibility, particularly in diversity, inclusion, employee development, and community support.
2. Glenmark Pharmaceuticals Limited
   - Overall ESG Score: 2.57
   - Environmental score is high (5.55), but the social score is very low (1.27).
   - Significant need for improvement in social responsibility initiatives and governance practices.
   - Recommendations include investments in education, healthcare, sustainable agriculture, and strengthening governance policies.
3. Tata Steel Ltd.
   - Overall ESG Score: 4.16 (Moderate)
   - Falls short of the Steel sector median.
   - Strong governance (5.05), but environmental and social responsibility performances need improvement.
   - Recommendations include significant reductions in energy, water, and greenhouse gas emissions, along with increased investments in community development and occupational health and safety.
4. Jindal Stainless Ltd.
   - Overall ESG Score: 4.43 (Moderate)
   - Lags behind the Steel sector median.
   - Strong governance practices (5.08), but environmental impact needs improvement.
   - Social responsibility initiatives are moderate, with room for growth in community development and sustainable livelihoods.
5. Jindal Steel & Power Limited (JSPL)
   - Overall ESG Score: 3.08 (Moderate)
   - Falls short of the Steel sector median.
   - Faces challenges in environmental sustainability, with high greenhouse gas emissions, water consumption, and waste generation.

- Social responsibility requires improvement, with focus areas including occupational health and safety, workforce diversity, and community engagement.

6. Bharat Petroleum Corporation Limited (BPCL)
   - Overall ESG Score: 4.94
   - Exceeds the Oil & Gas sector median, showcasing commitment to sustainability and social responsibility.
   - Impressive environmental score (5.50) and high social responsibility initiatives, with room for improvement in governance policies.
7. Tata Power Ltd.
   - Overall ESG Score: 4.62 (Moderate)
   - Exceeds the Electric Utilities sector median.
   - Impressive environmental performance (5.50) and moderate governance practices (4.18).
   - Social responsibility initiatives show promise but could be enhanced by increased investments in community programs and diversity efforts.
8. Adani Green Energy
   - Overall ESG Score: 5.08 (High)
   - Exceeds the Utilities sector median, showcasing commitment to sustainability and social responsibility.
   - Low environmental impact and strong governance practices contribute to the high overall score.
9. LTI Mindtree Ltd.
   - Overall ESG Score: 4.53 (Moderate)
   - Exceeds the Software and Tech Services sector median.
   - Impressive environmental performance (5.45) and strong governance practices (5.32).
   - Social responsibility initiatives need improvement, particularly in community development and diversity and inclusion.
10. Tech Mahindra Ltd.
    - Overall ESG Score: 4.53 (Moderate)
    - Slightly exceeds the Software and Tech Services sector median.
    - Strong environmental performance (5.22) and governance practices (5.74).
    - Social responsibility initiatives require improvement, focusing on diversity and inclusion efforts and community development.

11. Wipro Ltd.

- Overall ESG Score: 4.01
- Lags behind the Software and Tech Services sector median.
- Strong governance practices (6.96) and moderate environmental performance (4.68).
- Social responsibility initiatives need enhancement, particularly in diversity and inclusion, employee development, and community support programs.

This analysis provides a comprehensive overview of each company's ESG performance, highlighting strengths and areas for improvement across environmental, social, and governance factors. The recommendations offer guidance on potential actions to enhance sustainability and corporate responsibility.

Correlation Between ESG and Portfolio Return

To examine the connection between ESG and Portfolio Return, we will use correlation coefficients to assess the relationship between various variables. We will select pertinent financial metrics aligned with our research question, such as the 1-year return (2022-23) and 2-year return (2021-23). Similarly, we will choose the relevant ESG metric for our research question, specifically the total ESG score.

Our findings will represent through graphs and tables, illustrating the correlation coefficients between ESG and Portfolio Return. In our interpretation, we will elucidate whether a positive or negative correlation exists between ESG and financial metrics, determine the strength or weakness of the correlation, and provide insights into the potential reasons or implications of our discoveries.

For this study, we will use the following data for our sample companies:

Holding period return and Total ESG Score Company wise

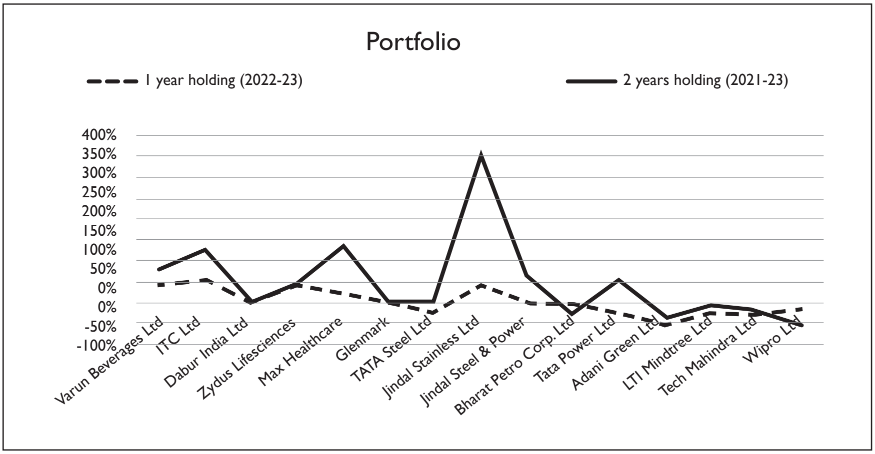
(Total ESG Rating prepared on 1-10 Scale where 1 is the lowest and 10 highest)

Company Name	1 year Holding (2022-23)	2 years Holding (2021-23)	Total ESG Score
Varun Beverages Ltd	45%	38%	2.46
ITC ltd.	54%	74%	3.74
Dabur India Ltd	1%	1%	4.46
Zydus Lifesciences Limited	41%	10%	2.47
Max Healthcare Institute Limited	26%	111%	2.69
Glenmark Pharmaceuticals Limited	4%	0%	2.57
TATA Steel Ltd	-21%	26%	4.16
Jindal Stainless Ltd	43%	317%	4.43
Jindal Steel & Power Limited	2%	58%	3.08
Bharat Petro Corp. Ltd	-5%	-20%	4.94

Company Name	1 year Holding (2022-23)	2 years Holding (2021-23)	Total ESG Score
Tata Power Ltd	-22%	78%	4.62
Adani Green Ltd	-52%	15%	5.08
LTI Mindtree Ltd	-23%	18%	4.53
Tech Mahindra Ltd	-27%	10%	4.53
Wipro Ltd	-13%	-38%	4.51
Average Return on Portfolio	4%	47%	

For this study, we will also use the following data on line graph for portfolio review.

Holding period return and Total ESG Score Company wise



From the above table and figure we can measure that holding a stock of a company who adhere to ESG norms there is chance to getting a positive return in the longer term.

Now we will employ the Pearson correlation coefficient to assess the linear correlation between the overall ESG score and ROI. The Pearson correlation coefficient spans from -1 to 1, with -1 denoting a perfect negative correlation, 0 indicating no correlation, and 1 representing a perfect positive correlation.

The following table displays the correlation coefficients between the overall ESG score and the financial metrics for the companies in our sample:

Correlation coefficients between Return on investment and the ESG score

Return on Investment (ROI)	Correlation Coefficient
1 year Holding (2022-23)	-0.64
2 year Holding (2021-23)	-0.02

From the data presented in above table, it is evident that there is no substantial correlation between the total ESG score and the ROI for the companies in our sample. Specifically, for the one-year holding period, the correlation coefficient is strongly negative, and for the two-year holding period, there is no discernible correlation between Return and ESG Score.

This discovery implies that the integration of ESG factors does not exert a significant influence on short-term financial performance. However, it tends to remain neutral in the context of the long-term return of the companies in our sample. Several potential explanations could account for this outcome, including:

- ESG factors might primarily function as risk mitigators for companies, providing protection against future uncertainties rather than offering opportunities for higher returns.
- The lack of a coherent ESG policy among entities in the Indian stock market could contribute to the observed results.
- Resource shortages, such as data and ESG professionals, may limit the effective integration of ESG practices.
- The reliability and consistency of ESG scores and metrics may vary across different rating platforms or frameworks.
- ESG integration may be influenced by various factors beyond the financial realm, such as market conditions, consumer preferences, and the regulatory environment.
- Indian companies might still need time to fully incorporate and optimize ESG factors into their operations.
- Investors may not be sufficiently aware of the impact of ESG factors on investment decisions, leading to a lack of proactive initiatives by companies in this regard.

Conclusion

The reports indicate a substantial increase in the adoption of Environmental, Social, and Governance (ESG) integration within the investment landscape. This trend has gained momentum, particularly in response to the unprecedented global challenges posed by the COVID-19 pandemic. In this new normal, where sustainability concerns take center stage, ESG integration is positioned as a valuable tool for investors. It extends beyond traditional financial analyses, allowing investors to uncover and navigate material risks and opportunities that might otherwise remain hidden. Concurrently, ESG integration serves as a mechanism for investors to align their portfolios with ethical values and broader societal objectives.

One of the primary challenges is the lack of uniform standards and comparability in ESG data and ratings. The multitude of ESG frameworks and methodologies further complicates matters, making it challenging for investors to make meaningful comparisons. Another point of contention arises from the perceived trade-off between financial performance and ESG outcomes, presenting an ongoing challenge. Additionally, there is a recognized need for more comprehensive education and guidance in the field of ESG investing as the landscape continues to evolve.

Concluding Remarks

ESG integration holds promise in enhancing the quality and resilience of investment decisions while contributing to positive social and environmental impacts. However, it necessitates more harmonization, transparency, and innovation in the ESG data and reporting landscape, alongside increased collaboration and communication among stakeholders in the investment ecosystem. Moreover, ESG integration should be tailored to the specific context and objectives of each investor, considering their risk appetite, time horizon, and preferences.

Limitations of Analysis

It is essential to acknowledge the limitations of this analysis. The findings are based on a limited selection of sources, which may not encompass the entire spectrum of viewpoints and evidence concerning ESG integration. The state of ESG integration is dynamic and evolving, and additional research and insights may have emerged since the last update of the sources. Therefore, it is advisable to consider this analysis as indicative rather than conclusive or all-encompassing.

Alignment with Future Directions and Recommendation

Looking forward, the role of ESG integration in investment decision-making is expected to continue expanding. As investors increasingly recognize its value, there is a growing emphasis on the need for further standardization and convergence of ESG metrics and reporting methodologies. Moreover, the concept of "**impact investing**" is gaining traction, reflecting a desire to actively promote positive social and environmental change through investments.

Recommendation for Retail Investor

- Retail investor should look for Impact Investing if they choose companies to invest
- For fixed income investment strategy retail investor should explore for Green bond security.
- Other financial product diversity

Recommendation for Institutional Investor

Institutional investor such as Insurance corporate, Mutual Fund Companies etc. should follow their own strategy to prepare rating on the security which help them for best screening methodology and impact investing. They should cover all the pillars of Environmental, Social and governance factor to prepare their own methodology instead of following to other rating agency.

Yet, certain areas within ESG integration remain relatively unexplored, such as the long-term impact of ESG on investment portfolios and its correlation with financial performance over extended time horizons. Additionally, the incorporation of Artificial Intelligence and Big Data analytics in ESG assessment is an emerging trend worth closely monitoring. These technologies have the potential to enhance the depth and accuracy of ESG analysis.

Methodological Enhancements

In the realm of methodological enhancements, there is a growing focus on developing more sophisticated ESG evaluation models. These models aim to provide investors with a clearer understanding of the materiality and relevance of various ESG factors to specific industries and companies. Furthermore, advancements in data collection techniques, such as satellite imagery and natural language processing, are facilitating more comprehensive and real-time ESG data collection, thereby improving the timeliness and accuracy of ESG assessments.

In summary, ESG integration has emerged as a transformative force in investment decision-making, poised to significantly shape the financial landscape. However, the journey ahead necessitates greater standardization, customization, collaboration, and ongoing innovation to meet the evolving needs of investors and society at large.

References

Boffo, R., and R. Patalano (2020), "ESG Investing: Practices, Progress and Challenges", OECD Paris, www.oecd.org/finance/ESG-Investing-Practices-Progress-and-Challenges.pdf

ESG score, stock price, volatility, and sustainable strategic management: Emma Klint & Lovisa Norell - https://hj.diva-portal.org/smash/get/diva2:1758164/FULLTEXT01.pdf

Journal of Reviews on Global Economics, 2018, 7, 668-681 - Olga V. Efimova*

Integrating ESG into the Investment Process - Remy Briand, Roger Urwin and Chin Ping Chia - August 2011 (MSCI ESG Research)

OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance https://www.oecd-ilibrary.org/sites/b854a453-en/index.html?itemId=/content/component/b854a453-en#section-d1e7762

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 173-190

Analyzing the Impact of ESG Data in Investment Decision

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Abstract

As sustainable investing gains prominence, understanding the intricate relationship between Environmental, Social, and Governance (ESG) data and investment decision-making becomes paramount. This study seeks to address the central problem faced by retail investors, that is, how to effectively assess the impact of ESG data in shaping their investment decisions. The purpose of this study is to comprehensively analyze how ESG considerations influence the choices made by retail investors in the dynamic landscape of financial markets. With the overarching goal of contributing to investor knowledge and decision-making processes, the study is structured around the key objectives to explore investors' awareness and perspectives on ESG company investing, to evaluating the correlation between ESG metrics and the financial performance of companies and to assess the practical impact of ESG integration on investment decision-making.

In this study, we employed the Sustainability Accounting Standards Board (SASB) frameworks as a foundational tool for analyzing the ESG performances of four industries. To further explore the relationship between ESG data and financial performance, we utilized the ESG data of companies from Sustainalytics, a leading provider of ESG research and ratings. Through this platform, we conducted a comparative analysis of companies from two industries, aiming to discern the potential direct or indirect correlations between ESG metrics and financial indicators. In addition to the secondary analysis, we conducted primary analysis involving retail investors in Telangana. Employing a random sampling method with a sample size of 100, we tried to assess the level of awareness among retail investors regarding the significance of investing in companies that prioritize

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ESG principles. This primary analysis serves as a crucial component, offering insights into the perceptions and preferences of retail investors in the Indian market.

The study yields specific findings, including the identification of the correlation type between ESG metrics and the financial performance of companies. Additionally, the assessment of the practical impact of ESG integration uncovers whether investors actively consider ESG criteria in their decision-making, the extent to which these considerations shape portfolios for the long run, and any challenges or benefits experienced. These detailed findings will provide an understanding of the role and influence of ESG factors in retail investors' decision-making processes.

Keywords: ESG Data, ESG Factors, ESG Metrics, Financial Performance, Investment Decision Making, Retail Investors, SASB, Sustainable Finance

Introduction

Environmental, Social, and Governance (ESG) criteria have become essential factors in assessing the ethical and sustainable practises of businesses. ESG is a framework for assessing a company's environmental impact, social relationships, and the effectiveness of its corporate governance. The financial community has begun to recognise the importance of considering not only financial performance but also the broader implications of investments on the world in recent years. Analysing the Influence of ESG Data on Investment Decision-Making is the topic of this study. Understanding the principles and implications of ESG becomes critical for fostering responsible and sustainable financial practises as investors navigate through the process. This study enhances understanding of the interconnected relationship between ESG considerations and financial outcomes, emphasizing its wider implications for both investors and companies. For which, the following objectives are taken into consideration.

- To exploring investors' awareness and perspectives on ESG company investing
- To evaluate the correlation between ESG metrics and the financial performance of companies
- Assessing the practical impact of ESG integration on investment decision-making

These objectives are considered with a view of identifying potential risks and opportunities associated with sustainability practises of companies. ESG-based investment awareness is crucial for investors to navigate risks while developing long-term value. The assessment of the practical impact of ESG integration on investment decision-making is critical in navigating the complex investment landscape, incorporating considerations other than profits to contribute to a more sustainable and responsible financial future. Recognising the effects of ESG data on corporate financial dynamics is critical for investors, businesses, and policymakers. The findings of this study can help investors adopt more responsible investment strategies, promote sustainable business practises, and contribute to a company's long-term resilience.

Review of Literature

The implementation of corporate ESG has several expected impacts and factors. First, as a strategic choice, management might think about implementing ESG. The implementation of sustainable practises within a company can yield several benefits, including enhanced firm value and sustainability promotion (Freeman 1984), cost savings and differentiation (Porter et al. 2019), positive effects on employee work engagement (Agarwal et al. 2012), improved employee productivity (Park 2020), and increased customer loyalty (Kim and Park 2017). Firms have the responsibility to implement ESG, regardless of whether doing so is required by law or regulation. Adopting ESG disclosures by itself will not make a business ethical, but it will help it make more ethical judgements when they come up. According to (Escrig-Olmedo et al. 2019), financial lenders and ESG rating agencies can be viewed as change agents by evaluating company practises.

There is still a dearth of research on the impact of ESG issues on non-professional retail shareholders' investment decisions. Despite a plethora of studies and surveys on institutional investors' ESG consideration in portfolio management (Kordsachia et al., 2021; PalaciosGonzález and Chamorro-Mera, 2018); ESG issues and index movement (Cui and Docherty, 2020; Serafeim and Yoon, 2022; Gibson et al., 2020); ESG from a corporate perspective (Fombrun, C. and Shanley, M., 1990; Serafeim, 2015); stakeholder perspective (more research on consumers and employees) (Werther Jr, W.B. and Chandler, D., 2005). There is a connection between good ESG performance and certain financial parameters, such as return on assets and return on equity. Companies with good ESG performance tend to have lower beta coefficients, indicating lower equity risk. (Koundouri et al 2022)

Numerous studies have demonstrated a positive correlation between an organization's financial performance and its performance on ESG metrics. As a result, investors benefit from ESG disclosures since they give them access to financially significant information. A study by Manchiraju and Rajgopal (2017) that evaluated the (poor) financial performance of businesses mandated by the Indian government to devote 2% of their income to corporate social responsibility (CSR) demonstrates some of this uncertainty. In this instance, sustainability regarding the important ESG concerns that could improve long-term performance was not CSR; rather, it was philanthropy and community connections.

Research Methodology

This study is based on both primary and secondary sources of information. The primary data is collected by administering questionnaires to retail investors. The questionnaire was sent through google forms. Random sampling technique was applied to a sample of 100. The secondary data are gathered from various journals and articles available on the internet. The quantitative data used for analysis was collected from stock screener website (Screener), ESG risk rating website (Sustainanalytics).

To address the first and third objectives, we chose nine companies from two distinct industries each: Information Technology (IT Service and Consulting) and Healthcare (three large-cap and three mid-caps). For these companies, we obtained ESG risk ratings from Sustainalytics as well as financial ratios such as ROE, ROCE, ROA, and EPS from Screener. This was done to conduct correlation and comparative analysis.

Correlation was used to investigate the relationships between ESG risk rating and financial metrics for the selected companies from both industries. The average ESG risk rating and financial ratios (ROE, ROCE, ROA, EPS) for each industry were then calculated.

A comparative analysis was then performed to demonstrate that industries with lower ESG risk ratings exhibit stronger financial performance compared to those with higher ESG risk ratings.

Limitations of the Study

- Data Limitations: The study relies on the accuracy and availability of ESG and finance data on various platforms.
- Industry Specificity: Findings apply to chosen two industries
- Sample Size is limited to 100
- Dynamic Nature of ESG: ESG considerations are dynamic, evolving with societal expectations; the study provides a snapshot

Data Analysis and Interpretation

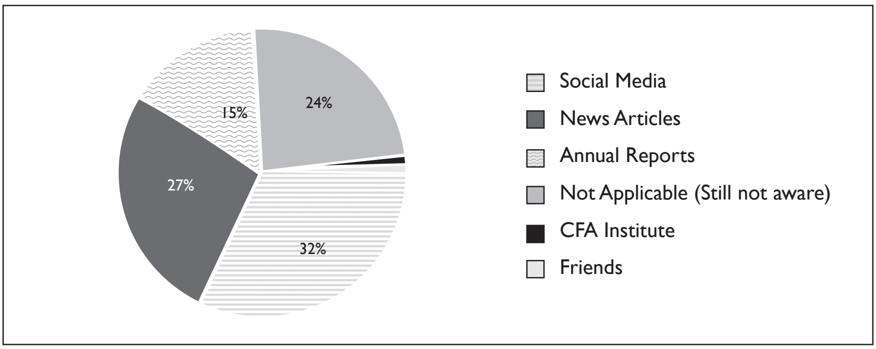
Exploring investors' awareness and perspectives on ESG company investing

The survey on the awareness of ESG-based investing included 100 respondents ranging in age from 20 to 50 and above. Most responses belonged to the younger demographic, specifically those aged 20 to 30. When asked about their investment habits, 27% said they invest frequently, while 42% said they invest occasionally. 17% of respondents prioritise short-term investment goals, while 35% prioritise long-term investment goals. In terms of investor interest, financial services were chosen by 64% of respondents, surpassing IT, which was chosen by 51%, healthcare, which was chosen by 42%, energy, which was chosen by 37%, and other sectors. A significant percentage (43%), expressed reliance on financial reports for decision-making. Investors who disclosed relying on both technical and fundamental research were 66%. Stock trading platforms have emerged as the preferred tool for analysing stocks and market trends. In terms of risk tolerance, many respondents took a moderate stance, emphasising a balanced approach to risk in their investment endeavours.

The primary goal of this survey was to investigate retail investors' awareness of ESG-based investing and how ESG data influences their investment decisions. The following questions are specific to the survey's main goal.

1. How did you gain awareness about ESG based investing?

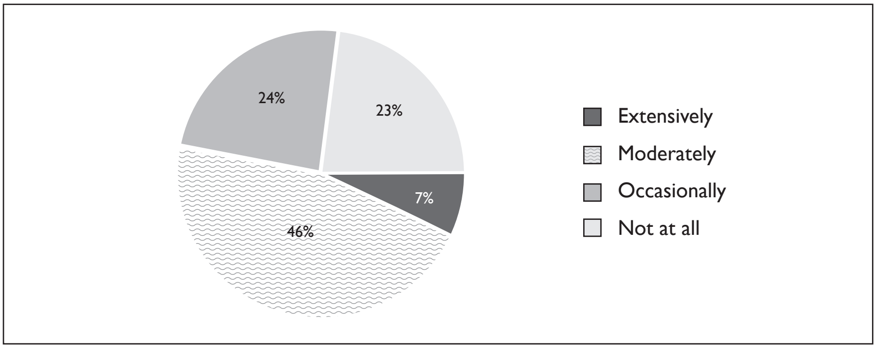
Awareness about ESG based investing



This suggests a diverse range o sources for ESG awareness, with social media and news articles being the most prominent channels. A significant portion of respondents, however, still expressed a lack of awareness.

2. While making investment decisions, to what extent do you consider ESG factors?

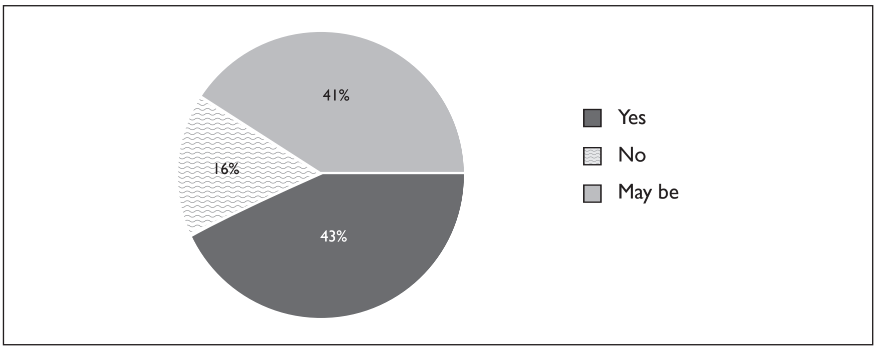
Extent of Consideration of ESG Factors



With the highest percentage falling into the "Moderately" category, it says that these respondents consider ESG factors in their investment decisions. However, a significant portion still either considers ESG only occasionally or not at all. This reflects a range of attitudes and practices regarding the integration of ESG considerations into investment decision-making processes.

3. Do you anticipate that ESG considerations will become important in your future investment choices?

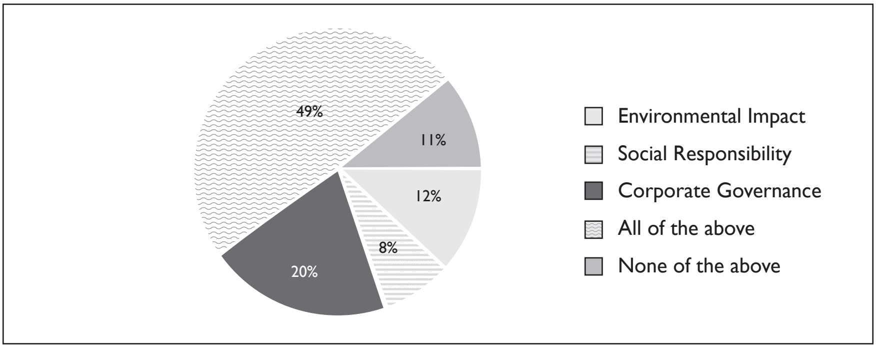
ESG Consideration for Future Investment Choices



A significant portion of respondents believe that ESG considerations will become more important in their future investment decisions, while a smaller proportion believe the opposite. The majority, on the other hand, are unsure, indicating a complex and evolving landscape in which the future importance of ESG factors is not universally agreed upon.

4. What specific ESG factors do you prioritize when considering an investment?

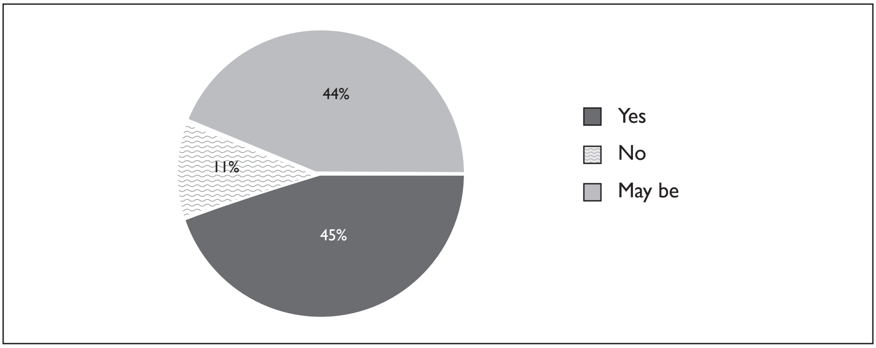
Preferred ESG Factors



A sizable proportion of respondents are willing to consider investments in companies with strong ESG practises, indicating a favourable attitude towards ESG-conscious companies. A smaller percentage is opposed to such investments, while the majority expresses uncertainty or flexibility in their ESG decision-making. Overall, the findings indicate a diverse landscape of attitudes and considerations regarding ESG in investment decisions.

5. Would you consider investing in companies with strong ESG practices?

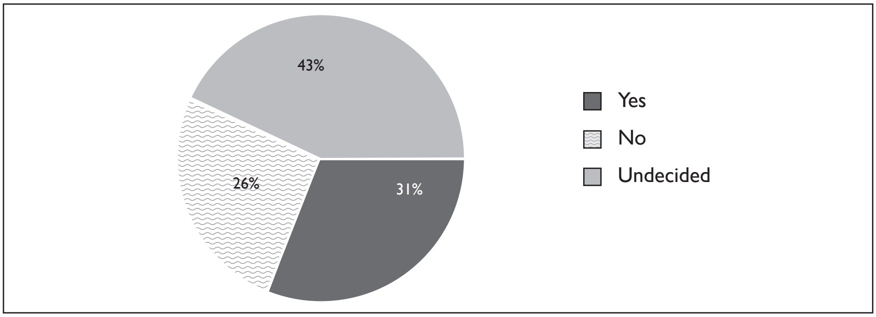
Investing in companies with ESG practices



A significant portion of respondents are open to considering investments in companies with strong ESG practices, indicating a positive inclination toward ESG-conscious companies. A smaller percentage is definitively opposed to such investments, and the majority expresses a level of uncertainty or flexibility in their decision-making regarding ESG considerations. Overall, the results suggest a varied landscape of attitudes and considerations regarding ESG in investment choices.

6. Are you more inclined to invest in companies with strong ESG ratings, even if it means potentially lower financial returns?

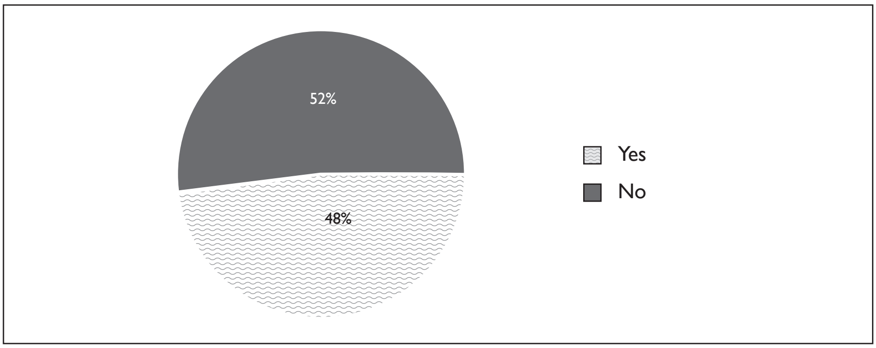
Inclined to invest in companies with strong ESG ratings despite



Many respondents are undecided about whether they would invest in companies with strong ESG ratings, even if it means potentially lower financial returns. There is a notable percentage willing to prioritize ESG considerations, but an almost equally significant portion remains uncertain. A smaller percentage is not inclined to prioritize ESG over financial returns, indicating diverse attitudes and considerations among the surveyed individuals.

7. Are you aware of ESG ratings agencies that assess and score companies based on their ESG performance? (e.g., Sustainalytics, MSCI ESG Ratings)

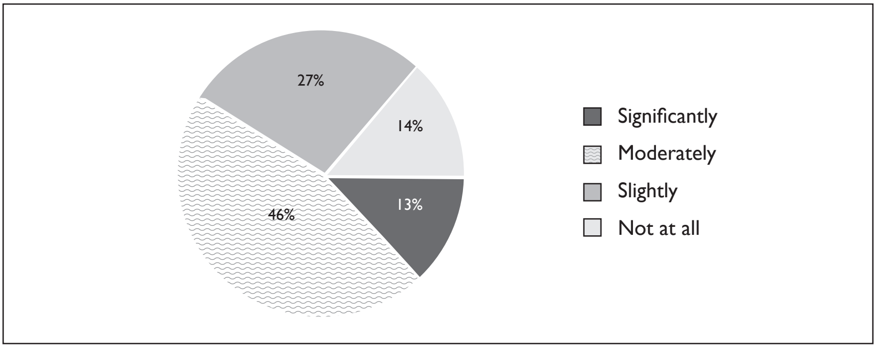
Awareness of ESG ratings agencies



The results show almost an even split, with a slightly larger percentage of respondents not being aware of ESG ratings agencies. This suggests that while there is awareness among some individuals, a notable portion of the surveyed population may not be familiar with these agencies and their role in evaluating companies based on ESG criteria.

8. If you are aware of ESG ratings, to what extent do these ratings influence your investment decisions?

Influence of ESG rating on investment making decisions



For a significant portion, ESG ratings have a moderate influence, with a smaller percentage considering them significantly or only slightly influential. Additionally, there is a minority for whom ESG ratings do not influence their investment decisions at all. This reflects a range of attitudes and practices regarding the impact of ESG ratings on investment choices.

Evaluating the correlation between ESG metrics and the financial performance of companies

ESG Ratings and Financial Performance of IT & Healthcare companies

Company Names	ESG risk rating	ROE	ROA	ROCE	EPS
WIPRO	13.20	15.90%	10.10%	17.70%	21.20
HCL	12.00	23.00%	16.10%	28.30%	56.90
INFOSYS	12.60	31.80%	19.90%	40.50%	59.80
Mphasis Ltd	19.20	21.90%	14.60%	28.90%	85.20
KPIT Technologies	18.80	25.70%	13.60%	30.20%	17.80
Coforge Ltd	22.30	25.10%	14.90%	30.80%	113.00
Sun Pharma	31.20	16.60%	11.50%	16.40%	35.60
Cipla	28.40	12.80%	10.20%	18.00%	42.80
Torrent Pharma	36.60	20.00%	8.85%	19.80%	39.70
Zydus Lifesciences Ltd	38.30	13.70%	9.47%	15.00%	27.70
Aurobindo Pharma Ltd	32.30	7.47%	5.25%	9.20%	39.70
Lupin Ltd	35.30	3.33%	1.84%	5.73%	21.30

The above data consists of 12 companies from 2 industries, they are IT and Healthcare. The ESG risk rating, ROE, ROA, ROCE, EPS of these companies have been listed down to do correlation analysis.

Correlation Analysis

	ESG risk rating	ROE
ESG risk rating	1	
ROE	-0.67	1

The correlation matrix indicates a strong inverse relationship (-0.67) between ESG risk rating and Return on Equity (ROE). As the ESG risk rating decreases, there is a tendency for ROE to increase, suggesting that companies with lower ESG risk ratings may exhibit higher average earnings from shareholders' equity.

	ESG risk rating	ROA
ESG risk rating	1	
ROA	-0.75	1

The correlation matrix reveals a robust inverse correlation (-0.75) between ESG

(Environmental, Social, and Governance) risk rating and Return on Assets (ROA). As the ESG risk rating decreases, there is a tendency for an increase in ROA, indicating that companies with lower ESG risk ratings may generally demonstrate higher profit from its assets.

	ESG risk rating	ROCE
ESG risk rating	1	
ROCE	-0.74	1

The negative sign indicates that as the ESG risk rating increases (indicating higher ESG risks), the ROCE tends to decrease. The magnitude of (-0.74) suggests a moderate strength of the correlation.

Though, it is not a perfect correlation, there is a noticeable tendency for ROCE to decrease as ESG risk rating increases which might reflected in a lower Return on Capital Employed. It could indicate that ESG-related issues are impacting the company's ability to generate returns on its capital.

	ESG risk rating	EPS
ESG risk rating	1	
EPS	-0.31	1

This table shows that there is a negative correlation between EPS and ESG risk rating. A correlation coefficient of (-0.31) between ESG risk rating and Earnings Per Share (EPS) suggests a weak negative correlation.

There is a soft inclination for companies with higher ESG risk ratings to have lower EPS. This may imply that higher ESG risks could potentially be associated with financial challenges or lower profitability.

4.3. a) Assessing the practical impact of ESG integration on investment decision-making.

ESG integration is the practice of incorporating environmental, social, and governance factors into investment analysis and decisions. It can help investors identify and manage risks, as well as opportunities, that may affect the long-term performance and sustainability of their investments.

To assess the practical impact of ESG integration on investment decision-making, the financial and ESG data of nine companies from two different industries each have been taken.

IT Sector

Market Cap

Large cap

Mid cap

IT (Service and Consulting)	ESG Risk Rating	Level	ROE	ROA	EPS	ROCE
WIPRO	13.2	Low	15.90%	10.10%	21.20	17.70%
HCL	12	Low	23%	16.10%	56.90	28.30%
INFOSYS	12.6	Low	31.80%	19.90%	59.80	40.50%
Mphasis Ltd	19.2	Low	21.90%	14.60%	85.20	28.90%
KPIT Technologies	18.8	Low	25.70%	13.60%	17.80	30.20%
Coforge Ltd	22.3	Medium	25.10%	14.90%	113.00	30.80%
AVERAGE	16.35		23.90%	14.87%	58.98	29.40%

Healthcare Sector

Healthcare (Pharma)	ESG Risk Rating	Level	ROE	ROA	EPS	ROCE
Sun Pharma	31.2	High	16.60%	11.50%	35.60	16.40%
Cipla	28.4	Medium	12.80%	10.20%	42.80	18.00%
Torrent Pharma	36.6	High	20%	8.85%	39.70	19.80%
Zydus Lifesciences Ltd	38.3	High	13.70%	9.47%	27.70	15%
Aurobindo Pharma Ltd	32.3	High	7.47%	5.25%	39.70	9.20%
Lupin Ltd	35.3	High	3.33%	1.84%	21.30	5.73%
AVERAGE	33.68		12.32%	7.85%	34.47	14.02%

Averages

	Avg of IT	Avg of Pharma
ESG risk rating	16.35	33.68
ROE	23.90%	12.32%
ROA	14.87%	7.85%
EPS	58.98	34.47
ROCE	29.40%	14.02%

- The Healthcare sector has a higher average ESG risk rating compared to the IT sector. This suggests that, on average, healthcare companies face higher perceived environmental, social, and governance risks compared to IT companies.
- The IT sector, on average, has a higher **ROE, ROA, EPS** compared to the Healthcare sector. This indicates that, on average, IT companies are more efficient in generating profits relative to shareholders' equity. They are also more effective in utilizing their assets to generate earnings. IT companies have higher earnings attributable to each outstanding share of common stock.
- The IT sector, on average, has a higher **ROCE** compared to the Healthcare sector. This suggests that, on average, IT companies are more efficient in generating profits from their capital employed.

This suggests that when environmental, social, and governance (ESG) risks are minimal, the financial performance of the company tends to be positive.

Next, regression analysis has been conducted on the same data

Regression

Regression Statistics	
R Square	65.29%
P-value	0.000255

The **R-squared** value of 65.29% in the regression analysis indicates that 65.29% of the variability in the combined dependent variables (ROE, EPS, ROCE, ROA) can be explained by changes in the independent variable, ESG ratings. This suggests a strong collective relationship between a company's environmental, social, and governance practices and its financial performance across various metrics.

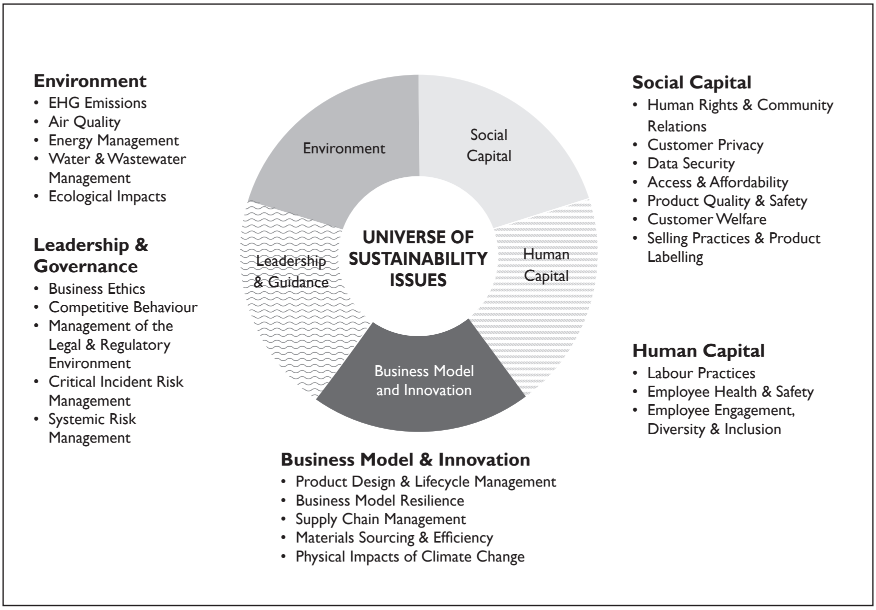
This suggests that companies with higher ESG ratings are also more likely to have higher Earnings Per Share (EPS), better Return on Capital Employed (ROCE) reflecting efficient capital utilization, higher Return on Assets (ROA) indicating efficient profit generation from assets, and higher Return on Equity (ROE), indicating strong profitability relative to equity. Better ESG practices make a company more financially successful in addition to being socially responsible. This allows investment portfolios to be aligned with businesses that exhibit both sound financial standing and ethical business practices.

A p-value of 0.000255 is extremely small, suggesting there's strong proof that the connection between ESG ratings and financial performance metrics is not just happening by chance. In simpler terms, it means there's a real and significant relationship between a company's ESG ratings and how well it performs financially. The low p-value supports the conclusion that ESG ratings play a meaningful role in explaining variations in the financial metrics under consideration.

4.3.b) Sustainability Accounting Standards Board (SASB)

SASB, a non-profit organisation founded in 2011, establishes industry-specific standards for companies to disclose to investors financially material sustainability information. SASB identifies key environmental, social, and governance (ESG) issues affecting financial performance across 77 industries. The goal is to provide investors with globally relevant, trustworthy, and comparable sustainability disclosures.

The SASB framework divides the disclosure topics into five components: environment, social capital, human capital, business model and innovation, and leadership and governance. These elements represent various facets of a company's sustainability performance. Here is a brief overview of each:



These are the SASB framework components for the **(IT) INDUSTRY**

Energy Management: It covers the company's use of energy from various sources, such as grid electricity, renewable energy, or fossil fuels, and how it affects the company's financial performance and sustainability goals.

Customer Privacy: It is one of the social topics that addresses the protection of personal information of customers and other stakeholders, such as their identity, preferences, behaviour, and location, according to SASB.

Data Security: Data security is an important aspect of Environmental, Social, and Governance (ESG) considerations, particularly in the context of the "G" or Governance component. A strong emphasis on data security contributes to building trust with stakeholders and protecting both customer and employee interests. As ESG considerations increasingly include governance and ethical dimensions, data security is becoming a key factor in assessing a company's overall sustainability and responsibility.

Employee Engagement, Diversity & Inclusion: Employee Engagement, Diversity, and

Inclusion are key components of the social criteria within Environmental, Social, and Governance (ESG) ratings. These aspects reflect how a company interacts with and supports its workforce, emphasizing fair treatment, diversity, and opportunities for all employees. Employee Engagement, Diversity, and Inclusion are critical elements of social responsibility and sustainability.

Competitive behaviour: It refers to the actions and strategies that individuals, organizations, or entities undertake to gain a competitive advantage in a market or industry. It's important to note that while healthy competition can drive innovation and benefit consumers, unethical or anti-competitive behaviour can lead to legal and reputational issues. Regulatory bodies exist to ensure fair competition and prevent antitrust violations in various industries.

Systematic risk management: Systematic risk management in the context of ESG involves identifying, evaluating, and actively addressing risks related to environmental, social, and governance factors. Companies that integrate these considerations into their overall risk management framework are likely to receive more favourable ESG ratings due to their commitment to sustainability, responsibility, and resilience.

Chemical Industry

Greenhouse Gas (GHG) emissions: as per SASB, this topic refers to the release of gases like CO_2 and methane during a company's activities, contributing to climate change. SASB guides companies in disclosing details about the type and intensity of emissions, aiding in environmental impact assessment and sustainability reporting.

Air Quality: this talks about the state of the air in a specific area, focusing on the concentration of pollutants that may affect human health and the environment. SASB emphasizing the importance of companies disclosing their contributions to air quality concerns, such as emissions and related impacts, to enable investors and stakeholders to assess associated risks and opportunities.

Waste and hazardous materials management: Company's management of solid wastes in manufacturing, agriculture, and other industrial processes, as well as the potential environmental and health risks associated with hazardous waste handling, treatment, and storage is covered in this topic.

Water and wastewater management: This deals with management of water resources, which may be influenced by regional differences in the availability and quality of water, as well as the potential environmental and health risks associated with wastewater generation and treatment.

Human rights and community: It includes issues related to human rights, protection of vulnerable groups, local economic development, access to and quality of products and services, affordability, responsible business practices in marketing, and customer privacy

Employee Health and Safety: Employee Health and Safety is one of the environmental topics It covers the company's management of physical and mental health, training, culture, and compliance with safety regulations.

Product Design & Lifecycle Management: Product design and lifecycle management are integral to ESG considerations, influencing environmental impact, social responsibility, governance practices, operational efficiency, and innovation. Companies that prioritize sustainable product development and lifecycle management are likely to receive favourable ESG ratings.

Management of the Legal & Regulatory Environment: It is integral to all three pillars of ESG environmental, social, and governance. It involves not only compliance but proactive efforts to mitigate risks, engage with stakeholders, and contribute to the overall sustainability and responsibility of the business. Companies that excel in these areas are likely to receive favourable ESG ratings.

Critical incident risk management: Critical incident risk management is an integral part of overall risk management strategies for organizations. It helps build resilience, ensures business continuity, and protects the well-being of employees and stakeholders in the face of unexpected and disruptive events.

Finance

Includes Customer Privacy, Data Security, Systemic Risk Management,

Access & Affordability: Ensures that products or services provided by industries are both accessible and affordable. "Access" focuses on making these offerings available to diverse populations, addressing issues of inclusivity and reach, while "Affordability" underscores the need for pricing structures that are economically feasible for the intended users.

Selling Practices & Product Labelling: Refers to the disclosure of information related to a company's marketing and sales strategies, as well as how products are labelled to convey environmental, social, and ethical attributes.

Physical Impacts of Climate Change: It captures environmental and social issues that may arise from operational disruptions due to physical impacts of climate change, such as extreme weather, shifting climate, sea level rise, and other expected physical impacts of climate change. It also captures socio-economic issues resulting from companies failing to incorporate climate change consideration in products and services sold, such as insurance policies and mortgages.

Business Ethics: It captures the company's ability to uphold high standards of integrity, transparency, and accountability in its business dealings, and to prevent, detect, and remediate any unethical or illegal behaviour.

Healthcare

Includes GHG Emissions, Human Rights & Community Relations, Waste & Hazardous Materials Management, Energy Management, Product Quality & Safety, Employee Health & Safety, Most of the topics from above and additionally covers:

Customer Welfare: It captures the company's ability to protect the health, safety, and wellbeing of its customers, and to prevent, mitigate, and remediate any negative impacts or harms arising from its products or services

Supply Chain Management: company's ability to create value and competitive advantage by enhancing the sustainability performance and resilience of its supply chain, and by developing products and services that address the ESG needs and preferences of its customers is captured in this.

Based on the SASB Materiality Map, the Energy industry has the highest number of materials ESG issues (i.e., more than 10 out of 26) among the four industries, followed by the Healthcare industry (i.e., 8 to 10 out of 26), the Finance industry (i.e., 6 to 8 out of 26), and the IT industry (i.e., 4 to 6 out of 26).

Findings

- Among the sample of 100, majority of respondents consider ESG concerns when making investment decisions, while some seldom or never do so, indicating a range of views and behaviours. Of these, 43% are considerations and 16% are not.
- From the correlation analysis, it is found that there is a negative association between ESG Risk Rating and correlation analysis. The ESG Risk Rating and Financial Ratios were compared (ROE, ROCE, ROA, EPS). This indicates that financial ratios will decline and vice versa if the ESG risk rating rises.
- The SASB framework, shows that, among the four industries, the Energy sector has the most materials ESG concerns followed by the Healthcare sector, the Finance sector, and the IT sector

- By comparing data from two industries (IT services and consulting and Healthcare pharma), to assess the relation between financial ratios (ROE, ROCE, ROA, and EPS) and ESG risk, we were able to determine that industries with greater ESG risk ratings perform worse in financial measures.
- A robust 65.29% R-squared value reveals a significant link between ESG ratings and financial metrics (ROE, EPS, ROCE, ROA). The low p-value of 0.000255 confirms that this relationship is not by chance, underscoring the impactful role of ESG practices in explaining variations in financial performance, aligning social responsibility with financial success.

Conclusions

In conclusion, this study examined the awareness of ESG based investments among a sample of 100 retail investors of Telangana. It assesses investors' awareness and perspectives on ESG investing, and evaluates the correlation between ESG metrics and financial performance. The study utilizes the Sustainability Accounting Standards Board (SASB) framework and ESG data from Sustainalytics to analyse the ESG performance of companies in different industries. Correlation and regression analysis were conducted on 12 companies, 6 companies from each industry, namely IT & Healthcare.

The findings of this study indicate a negative correlation between ESG risk rating and financial ratios, suggesting that companies with lower ESG risk ratings tend to have better financial performance. The study highlights the need for increased awareness and understanding of ESG factors among investors and emphasizes the importance of considering ESG criteria in investment decision-making.

This study emphasises how crucial it is to take environmental, social, and governance (ESG) factors into account when making investments, and how it will help investors to ensure the long-term viability of their investments.

References

Agarwal, Upasna A., Sumita Datta, Stacy Blake-Beard, and Shivganesh Bhargava. 2012. Linking LMX, Innovative work behaviour and turnover intentions: The mediating role of work engagement. Career Development International 17: 208-30. [Google Scholar] [CrossRef]

Amel-Zadeh, A.; Serafeim, G. Why and How Investors Use ESG Information: Evidence from a Global Survey. Financ. Anal. J. 2018, 74, 87-103. [Google Scholar] [CrossRef][Green Version]

Escrig-Olmedo, Elena, María Á. Fernández-Izquierdo, Idoya Ferrero-Ferrero, Juana María Rivera-Lirio, and María Jejús Muñoz-Torres. 2019. Rating the raters: Evaluating how ESG rating agencies integrate sustainability principles. Sustainability 11: 915. [Google Scholar] [CrossRef][Green Version]

Freeman, R. E. 1984. Strategic Management: A Stakeholder Approach. New York: Cambridge University Press. [Google Scholar]

Friede, Gunnar, Timo Busch, and Alexander Bassen. 2015. ESG and financial performance: Aggregated evidence for more than 2000 empirical studies. *Journal of Sustainable Finance & Investment* 5: 210–33. [Google Scholar]

Kim, Woo Cheol, and Ji Won Park. 2017. Examining structural relationships between work engagement, organizational procedural justice, knowledge sharing, and innovative work behavior for sustainable organizations. Sustainability 9: 205. [Google Scholar] [CrossRef][Green Version]

Koundouri, Phoebe, Nikitas Pittis, and Angelos Plataniotis. "The impact of ESG performance on the financial performance of european area companies: An empirical examination." Environmental Sciences Proceedings 15.1 (2022): 13.

Lee, Daren, Robert Faff, and Saphira Rekker. 2013. Do high and low-ranked sustainability stocks perform differently? *International Journal of Accounting and Information Management* 21: 116-32. [Google Scholar] [CrossRef]

Manchiraju, H., & Rajgopal, S. (2017). Does Corporate Social Responsibility (CSR) Create Shareholder Value? Evidence from the Indian Companies Act 2013. *Journal of Accounting Research*, 55(5), 1257-1300. EconLit.

Matos, Pedro Verga, Victor Barros, and Joaquim Miranda Sarmento. 2020. Does ESG affect stability of dividend policies in Europe? Sustainability 12: 8840. [Google Scholar]

Porter, Michael, Serafeim George, and Kramer Mark. 2019. Where ESG Fails. Institutional Investor. Available online: https://www.institutionalinvestor.com/article/b1hm5ghqtxj9s7/Where-ESG-Fails (accessed on 10 June 2021).

Park, Kwong O. 2020. How CSV and CSR affect organizational performance: A productive behavior perspective. *International Journal of Environmental Research and Public Health* 17: 2556. [Google Scholar] [CrossRef] [Green Version] 2022/BusinessResponsibilityandSustainabilityReport.pdf www.forbesindia.com

Sustainability Accounting Standards Board: Everything You Need to Know (investopedia.com) https://sasb.org/

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 191-202

Greenwashing: A Marketing Gimmick to Hoodwink Consumers

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Abstract
SEBI's recent move in introducing Environmental, Social and Governance (ESG) compliance has had a ripple effect across various layers of business ecosystems. This was preceded by the mandate spelled out in the Companies Act 2013 requiring companies to include a report by their Board of Directors on conservation of energy, along with annual financial statement. The consumers of todays modern world are greatly concerned about global warming and environmental pollution and they have a tendency to choose products that cause lesser environmental strains. This has created undue pressure on companies to reposition their image as being the flag bearers of sustainable practices and being the stewards of environmental protection. To comply with the standards set by regulatory authorities, some companies resort to making incomplete, unsubstantiated, or outright false claims as regards the sustainability of their products, services or their operations in general. The companies adopt several greenwash practices to make the consumers believe and invest in their products and services. Misleading claims about the ecological affability attributes of their products and services along with the sustainability slogan is bombarded on the consumers. The purpose of this study is to examine the phenomenon of greenwashing from the consumer's lens. Efforts are made to identify how the consumers perceive this façade and whether it affects their buying behaviour in any particular way.

Keywords: Environmental Pollution, ESG, Global Warming, Greenwashing, Sustainability

Introduction
The twenty first century has witnessed a significant increase in the environmental concern and activism. The green movement and adoption

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of sustainable development practices has made the consumers to change their consumption behaviour. The demand for green products saw an exponential rise in the 1990s. It has led to the creation of a new type of customers called green consumer. Shrum, McCarthy and Lowrey (1995) define a green consumer as someone ‘’whose purchase behaviour is influenced by environmental concerns”. He is someone who has a pro-environmental attitude and prefers to buy products and services that cause minimal harm to the ecological system. He is also someone who is willing to pay a premium price for the product as he is not willing to compromise on the eco-friendly tag of the product.

Research by Haws, Winterich, and Naylor (2014) showed that consumers with higher concerns for environmental resources have higher preferences for environment friendly products compared to consumers with lower concerns for environmental resources. The popularity of green consumerism is on the rise nowadays and people are willing to shell extra for green products over the non-green alternatives.

As consumers have become more environment conscious, business houses have begun to modify their advertising strategy to address the society’s new concerns. This has led to the emergence of green marketing. It involves all activities involved in promoting a product on the basis of its environmental benefits and social qualities and selling them on an ethical platform. Also known as environmental or eco-friendly marketing, green marketing strives to reduce sound and environmental pollution to a great extent. Eco labelling and green positioning are some of the measures adopted by companies to promote the nature friendly attributes of their products. In fact, Coddington (1993) and Meffert and Kirchgeorg (1993) suggested that green positioning is an essential factor in the success of green branding strategies. Green branding strategy adopts a functional as well as emotional approach to tap the consumer. The functional aspect revolves around making the consumers aware about the eco-friendly qualities of the products while the emotional aspect tries to strike a connection between the consumer and the brands ideology of being environment friendly.

The eagerness to meet consumer’s demand for eco-friendly products have also prompted companies to resort to activities that violate the ethical framework of doing businesses. A prominent practice amongst these is Greenwashing. The term greenwash coined by Jay Westervelt, in his essay named Multiculturalism published in 1986. It is the practice of misleading consumers via false, vague or unsubstantial claims (Baum,2011; Dahl 2010; TerraChoice2009). It is a strategy related to attracting a green audience, making claims by promoting product as being green (Naderer et al. 2017) or by misleading and incorporating unjust allegations (Seele & Gatti, 2015).

Firm level greenwashing and product level greenwashing are the two popular tactics adopted by firms in green washing. Firm level greenwashing is one where the companies with low environmental performance tries to create a better corporate image by falsifying their environmental performance. With the aim of creating a misleading positive impression of overall performance, companies disclose positive environmental action to conceal their negative ones (Lyon & Maxwell, 2011). On the other hand, product level green washing is misleading consumers about the eco friendliness of the firms products and service. This is a common marketing strategy wherein firms exaggerate the environmental benefits of their products or services with the aim of increasing sales (Marquis, Toffel & Zhou, 2016).

Parguel et al.(2015) described a new form of greenwashing that the authors called 'Executional Greenwashing'. This strategy of greenwashing does not use any type of claim that was described before, but it suggests nature-evoking elements such as images using colors (e.g., green, blue) or sounds (e.g., sea, birds) (de Freitas Netto, S.V. et.al, 2020). According to Hartmann and Apaolaza-Ibáñez (2015) these elements can "trigger ecological inferences subtly by activating implicit references to nature through nature imagery".

The greenwashing practices can range from slight exaggerations to full fabrication about the environmental friendliness of their product or service. It is oftentimes covered in green advertisements which have increased tremendously over the past years (Ahern et al.2013). TerraChoice, an environmental marketing firm has identified seven different ways in which companies engages in greenwashing and are known as the seven sins of greenwashing (Terrachoice, 2009). The sin of hidden trade-off refers to the labelling of the products as more eco-friendly or greener than what it actually is. When the environmental claims are made without having substantial evidence to support such claims it is said to be the sin of no proof. The sin of vagueness relates to the claims that are poorly defined or broad that its real meaning is likely to be misunderstood by the consumers. The sin of worshiping false labels refers to the creation of false certifications or labels to mislead the consumers. The sin of irrelevance refers to the environmental claims that are legitimate but are of no significance. The sin of lesser than two evil states that the environmental claims of a product have no environmental benefits to begin with. The sin of fibbing relates to the claims that are blatantly false. Among all the 7 sins of greenwashing the sin of fibbing is the most serious one but it is found rarely.

One of the most famous examples of greenwashing is Ford Motor Company's "It's not easy being green" campaign for the hybrid escape SUV. In reality, Ford's cars were the worst carbon emitters and had the worst fuel efficiency trend of any major automaker as per Union of Concerned Scientists. (Friedman & Mackenzie,2004). Another popularly cited example of greenwashing was about Fossil fuel giant BP who changed their name to Beyond Petroleum and publicly added solar panels on their gas stations. In December 2019, an environmental group called ClientEarth lodged a complaint against BP for misleading the public with its advertisements that focused on BP's low-carbon energy products, when more than 96% of its annual spend is on oil and gas. In yet another case, in June 2021, environmental organisation Earth Island Institute filed a lawsuit against the beverage giant Coca Cola for falsely advertising that it is sustainable and eco-friendly despite being the largest plastic polluter in the world.

According to advertising firm Ogilvy and Mather, greenwashing practices are growing in the last decades to epidemic proportions (Hsu T,2011). The multitude of vague and misleading environmental claims have caused consumers to question corporate integrity and honesty, The concern over green washing is that, it not only misleads the consumers, but also if the unscrupulous marketers continue to be environment friendly, then companies true to their environmental mission, lose their competitiveness. (Furlow,2010). To top it all, overuse and misuse of the "green" claims can saturate the market to the point that greenness of the product may become meaningless to the consumer. (Zimmer et.al,1994).

Review of Literature

Delmas and Burbano (2011) conducted a study to examine the drivers of greenwashing. They constructed a framework in which the drivers of greenwashing were divided into three levels, external, organisational and individual. They suggested a multi stakeholder approach comprising managers, policymakers and non-governmental organisations to reduce the prevalence of greenwashing by improving knowledge about greenwashing and effectively aligning intra-firm structures, processes and incentives.

Chen and Chang (2013) conducted a study to explore the influence of greenwashing on green trust and discuss the mediation role of green consumer confusion and green perceived risk. The findings of the study emphasized that greenwashing is negatively related to green trust. In addition, the study found that green consumer confusion and green perceived risk mediate the negative relationship between greenwash and green trust. The results also demonstrated that greenwashing is positively associated with consumer confusion and green perceived risk which would negatively affect green trust.

Richards (2013) analysed the impact of green advertising through evaluating consumers' connection to the environment, trust in an advertising and willingness to purchase green products. The findings of the study showed that the consumers are generally skeptical of green advertisements and have clear motivating and deterring factors when purchasing green products.

Benoit-Moreau and Parguel (2015) in their study examined the executional greenwashing effect, defined as the use of nature evoking elements in advertisements to artificially enhance a brand's image. The research suggested a viable middle ground to regulate executional greenwashing, through the introduction of a traffic light label displaying environmental performance information in a specific part of the advertisement.

Akturan (2018) made an attempt to explore the relationship among greenwash, green brand equity, green brand credibility, green brand associations and purchase intention. For the study, he chose two brands, a high-involved brand and a low-involved brand. The study found that green brand associations and brand credibility positively affect green brand equity. In addition, green brand equity also had a strong positive impact on the purchase intentions of the consumers.

Teeseling (2020) explored the relationship between firm level greenwashing, the advertisement type and brand credibility within the FMCG industry. The results of the study indicated that there is a main effect of greenwashing presence on brand credibility as well as an interaction effect between greenwashing presence and level of environmental concern on brand credibility.

Rai (2021) conducted a study on greenwashing and its impact on consumers and environment. The findings of the study shows that consumers are environmentally conscious and prefer green products but are not much informed about green claims made for products which turns to be greenwashing.

Research Problem

Topics like climate change, global warming and sustainability have been garnering enough attention in the hearts and minds of all stakeholders. With the United Nations adopting the Paris Agreement in 2015, an increasing number of companies have pledged to reduce their green gas emissions to net zero. Despite all these efforts, certain companies and entities mislead the public by deceptive marketing and false claims of sustainability which undermines credible efforts to reduce emissions and tackle the climate crisis. Greenwashing hampers the trust and action needed to bring about a global change and secure a sustainable ecosystem. The study is conducted to gauge the phenomenon of greenwashing from the consumers viewpoint. The awareness and consumers perception of greenwashing along with its influence on the buying behaviour is delved.

Objectives of the Study

The following are the objectives set for the study

- To gauge the awareness of greenwashing of products and services among consumers
- To know the consumers perception towards greenwashing
- To study whether green claims made by firms influences consumers purchase intentions
- To know whether consumers are able to distinguish between a greenwashed ad and genuine ad
- To study the relationship between environmental consciousness and purchasing of greenwashed products

Research Design

The study was conducted using primary data collected from 100 consumers residing in the state of Kerala. A self-administered questionnaire was used for data collection. The questionnaire consisted three parts- the first part consisted of the demographic profile of the respondents, the second part consisted of their level of environmental awareness and the third part consisted of the questions intended to measure their perception on greenwashing and how it affects their green purchase intentions. The data collected were analysed using One Way ANOVA, Chi Square test, and Pearson's Correlation test.

Results and Discussion

***Objective 1**:* To gauge the awareness of greenwashing of products and services among consumers

On examining the awareness of consumers, it was found that 62 per cent of the respondents were aware while 38 per cent were not at all aware about greenwashing of products and services,

The following hypothesis was set as regards this objective

H_0: There is no significant difference regarding awareness of greenwashing based on the gender of the respondents.

The chi square test was used to test the above hypothesis and it gave the following result X^2 (1, N = 100) = 6.621, $p = 0.010$). From this, it can be concluded that there is a significant difference in the awareness of consumers as regards greenwashing based on the gender of the respondents.

A second hypothesis set as regards this objective was

$H_{0:}$ There is no significant difference regarding the awareness of greenwashing based on the age group of respondents.

One Way ANOVA test was run to check the above hypothesis and it gave the following results F (3,96) =0.144, p=0.932. From this, it can be concluded that there is no significant difference regarding the awareness of greenwashing based on the age group of respondents.

Objective 2: To know the consumers perception towards greenwashing

The consumers perception as regards the seven sins of greenwashing were studied in detail under this objective. The consumers were asked to give their opinions on each of the seven sins on a five point scale namely extremely harmful, harmful, somewhat harmful, slightly harmful and not harmful. The top two responses under each sin have been given below.

As regards the sin of hidden trade off, 42 per cent of the consumers considered it as somewhat harmful while 29 per cent considered it as extremely harmful.

As regards the sin of no proof, 41 per cent considered it harmful while 28 per cent termed it as somewhat harmful.

As regards the sin of vagueness, 50 per cent termed it as harmful while 24 per cent considered it somewhat harmful.

As regards the sin of irrelevance, 38 per cent considered it harmful while 21 per cent each termed it as somewhat harmful and slightly harmful.

As regards the sin of lesser of two evils, majority (60 per cent) termed it as harmful while 31 per cent considered it as somewhat harmful.

As regards the sin of fibbing, 62 per cent of the respondents considered it extremely harmful while 29 per cent termed it as harmful.

As regards the sin of worshipping false labels, 59 per cent considered it harmful while 16 per cent termed it as somewhat harmful.

Perception of Consumers as to why firms resort to greenwashing

The consumers were asked to give their perception as to why they thought that companies and firms resorted to greenwashing. The top three reasons emerged as to increase brand image followed by gaining a competitive advantage and increasing revenue.

Perception of consumers as to which sector in which greenwashing is rampant

As regards the sector in which greenwashing is rampant, the consumers gave top rank to electronics followed by cosmetics and food and beverages.

Objective 3: To study whether green claims made by firms influences consumers purchase intentions

The consumers were asked to give their opinions as regards whether the various green claims made by companies influenced their purchase decisions. They were asked to give their opinions on a five-point scale viz. A lot, reasonably, somewhat, minimally and not at all. The top two opinions of each claim are presented below:

As regards, influence of certified label in buying a product, 36 per cent of the respondents were affected minimally by it while 25 per cent were influenced somewhat by it.

As regards no CFCs claim, majority of the respondents (55 per cent) stated that it somewhat influenced their purchase intentions while 21 per cent said it influenced only minimally.

As regards, recycled label, 42 per cent of the respondents stated that it minimally influenced their purchase intentions while 32 per cent said it somewhat influenced their buying behaviour.

As regards, zero carbon emission claim given by companies, 49 per cent of the respondents stated that they were reasonably influenced by it while 20 per cent stated that they were somewhat influenced by it.

As regards greener than other products claim by companies, 38 per cent responded that this influenced their purchase intentions a lot while 31 per cent said it affected their purchase intentions reasonably.

The table below shows the influence of greenwashed labels on the purchase intentions of the consumers.

Influence of Labels on the Purchase Intentions of Consumers

Labels Claimed by Companies	Mean	SD
Certified label	2.35	0.108
No CFCs claim	2.79	0.087
Recycled label	2.24	0.084
Zero Carbon emission	3.39	0.105
Declaring slightly greener than others	1.93	0.083

Source: Primary Data

The table above shows the mean and standard deviation of the influence of five greenwashed labels used by companies on the purchase intentions of consumers. As per the table, it can be seen that Zero Carbon Emission label has the highest mean score of 3.39. It can be concluded that this label has the most significant influence on the purchase intentions of the respondents followed by no CFCs claim and certified label.

Effects of Greenwashing on Consumer Buying Behaviour

The consumers were asked whether the knowledge of a greenwashed product or service affected their consumer behaviour. 36.3 per cent of the consumers responded that the knowledge about greenwashed products or services led to negative purchase intentions for green products while 28.06 per cent opined that it led to skepticism and 24.7 per cent said it led to distrust in these products and services.

Objective 4*:* To know whether consumers are able to distinguish between a greenwashed ad and genuine ad

The consumers were shown the ads of Nestle, H&M Go Green Wear blue ad, Volkswagen and Organix which were purported to have elements of greenwashing in them. After watching the ads, the consumers were only able to identify organix ad as being greenwashed.

The following hypothesis was set in this regard

$H_{0:}$ The consumers will be able to identify a greenwashed ad from a genuine ad

A one -way ANOVA test was performed and it gave the following results which are presented in the below table.

Results of One-Way ANOVA-Perceived Deception in Greenwashed and Genuine Advertisements

Source ofvariation	Sum of Squares	Df	Mean Square	F value	P value
Between Groups	10.7475	3	3.5825		
Within Groups	85.05	396	0.2147		
TOTAL	89.4375	399		16.68	0.000

Source: Computed

As per the results obtained from the above table, it can be concluded that null hypothesis is rejected which infers that the consumers are not able to identify a greenwashed ad from a genuine ad.

Attitude Towards A Greenwashed Advertisement

The consumers were not able to identify that the commercials of Nestle, Volkswagen and H&M contained elements of greenwashing. Further they also had a favourable attitude towards these ads and considered them as good commercials.

The following hypothesis was set in this regard

H_0: The consumers will not have a more favourable attitude towards a greenwashed ad than a genuine ad

A one-way ANOVA test was performed and it gave the following results which are presented in the following table.

Attitude Towards Greenwashed Ad and Genuine Ad

Source ofVariation	Sum of Squares	Df	Mean Square	F value	P value
Between Groups	24.11	3	8.036		
Within Groups	269	396	0.679		
TOTAL	293.11	399		11.83	0.000

Source: Computed

As per the results obtained from the above table, it can be concluded that null hypothesis is rejected which infers that the consumers will have a more favourable attitude towards a greenwashed ad than a genuine ad.

Objective 5: To study the relationship between environmental consciousness and purchasing of greenwashed products

The following hypothesis was set in this regard

Ho: there is no association between level of environmental awareness and purchasing of greenwashed products

In order to test whether there is any relationship between environmental consciousness and purchasing of greenwashed products among consumers, Pearson's Correlation Coefficient was carried out. The results are given in the below table.

Correlation Between Level of Environmental Awareness and Purchasing of Greenwashed Products

Variables	R	P VALUE
Level of environmental awareness	1	
Purchasing of greenwashed product	-0.0255	0.8

Source: Computed

From the above table it is seen that the null hypothesis is not rejected and hence it can be concluded that there is no association between level of environmental awareness and purchasing of greenwashed products.

Conclusion

This study was conducted with the intention of understanding the consumers' perception about greenwashing and its effects on their buying behaviour. The findings of the study revealed that most of the respondents were aware about the phenomenon of greenwashing and they considered the sin of fibbing as the worst among all the sins prevalent in greenwashing. The knowledge about a product being greenwashed led to negative purchase intentions, skepticism and it also built distrust in these products and services. The consumers also stated that greenwashing tactics were adopted by companies to increase brand image followed by gaining a competitive advantage and increasing revenue. However, they were not able to distinguish elements of greenwashing present in deceptive commercials. Moreover, they even considered these deceptive commercials as being genuine and good. The study also found that environmental awareness of the consumers was directly linked with their green purchasing intentions. In conclusion, greenwashing is a severe problem causing harm to both the environment and the society. It is essential for consumers to be vigilant and to carefully research the environmental claims made by companies to avoid supporting greenwashing.

References

Ahern, L., Bortree, D. S., & Smith, A. N. (2013). Key Trends in Environmental Advertising across 30 years in National Geographic Magazine. *Public Understanding of Science*, 479-494. doi:10.1177/0963662512444848

Akturan, U. (2018). How does Greenwashing Affect Brand Equity and Purchase Intention. *Euromed Journal of Business*, 67-79.

Baum, L. M. (2011). It's not Easy being Green...Or is it? A Content Analysis of Environmental Claims in Magazine Advertisements from the United States and United Kingdom. *Environmental Communication*, 423-440.

Benoit-Moreau, F., & Parguel, B. (2015). Building Brand Equity with Environmental Communication: An Empirical Investigation in France. *Euromed Journal of Business*, 100-116.

Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk. *Journal of Business Ethics*.

Coddington, W. (1993). Environmental Marketing's New Relationship with Corporate Environmental Management. *Environmental Quality Management*, 297-302. doi:10.1002/tqem.3310020310

Dahl, D. (2010). Do You Know What You Are Buying. *Environmental Health Perspectives*, 246-252. doi:10.1289/ehp.118-a246

de Freitas Netto, S. V., Sobral, M. F., & Ribeiro, A. R. (2020). Concepts and forms of greenwashing: a systematic review. *Environmental Sciences Europe*. doi:https://doi.org/10.1186/s12302-020-0300-3

Delmas, M. A., & Burbano, V. C. (2011). Drivers of Greenwashing. *California Management Review*, 64-87.

Friedman, D., & MacKenzie, D. (2004). *Automaker rankings 2004.* Cambridge,MA: UCS Publications.

Furlow, N. E. (2010). Greenwashing in the New Millennium. *Journal of Applied Business and Economics*, 67-72.

Hartmann, P., & Apaolaza-Ibáñez, V. (2009). Green advertising revisited. *International Journal of Advertising*, 715-739. doi:10.2501/S0265048709200837

Haws, K. L., Winterich, K. P., & Naylor, R. W. (2014). Seeing The World through Green Tinted Glasses: Green Consumption Valuesand Responses to Environment friendly products. *Journal of Consumer Psycology*, 336-354.

Hsu, T. (2011). Skepticism grows over products touted as eco-friendly. *Los Angles Times*. Retrieved from https://www.latimes.com/business/la-xpm-2011-may-21-la-fi-greenwash-20110521-story.html

Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate Environmental Disclosure under Threat of Audit. *Journal of Economics & Management Strategy*, 3-41. doi:10.1111/j.1530-9134.2010.00282

Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing. *Organization Science*, 483-504. doi:10.1287/orsc.2015.1039

Meffert, H., & Kirchgeorg, M. (1993). Sustainable Development. *Harvard Business Manager*, 34-45.

Naderer, B., Schmuck, D., & Matthes, J. (2017). Greenwashing: Disinformation through Green Advertising. *Commercial Communication in the Digital Age*, 105-120.

Paraguel, B., Benoit-Moreau, F., & Russell, C. A. (2015). Can evoking nature in advertising mislead consumers? The power of 'executional greenwashing. *International Journal of Advertising*, 107-134. doi:https://doi.org/10.1080/02650487.2014.996116

Rai, P. (2021). Greenwashing and its Impact on Consumers and Environment. *International Journal of Multidisciplinary Educational Research*, 125-127.

Richards, L. (2013). Examining Green Advertising and its Impact on Consumer Skepticismand Purchasing Patterns. *The Elon Journal of Undergraduate Research in Communication*, 78-90.

Seele, P., & Gatti, L. (2015). Greenwashing Revisited: In Search of a Typology and Accusation-Based Definition Incorporating Legitimacy Strategies. *Business Strategy and the Environment*, 239-252. doi:10.1002/bse.1912

Shrum, L. J., McCarthy, J. A., & Lowrey, T. M. (1995). Buyer Characteristics of the Green Consumer and Their Implications for Advertising Strategy. *Journal of Advertising*, 71-82. doi:10.1080/00913367.1995.10673477

Teeseling, F. V. (2020). *The Effect of Firm-Level Greenwashing and Green Advertisements on Brand Credibility.* Tilburg: Tilburg University.

TerraChoice. (2009). *The Seven Sins of Greenwashing: Environmental Claims in Consumer Markets.* Retrieved from http://sinsofgreenwashing.org/findings/greenwashing-report-2009/

Zimmer, M., Stafford, T., & Stafford, M. (1994). Green Issues: Dimensions of Environmental Concern. *Journal of Business Research*, 58-69.

Journal of Institute of Public Enterprise
ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 203-216

Promoting Transgender Empowerment Through Social Entrepreneurship in India: A Case Study from Delhi and Uttar Pradesh

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Social entrepreneurship is like
regular entrepreneurship but with a twist

Abstract

This study examines the social entrepreneurial scene in the Food industry in Delhi and Noida, Uttar Pradesh, India, with a focus on transgender empowerment. The introduction highlights the significance of social, economic, political, and legal emancipation for the transgender population while outlining the historical background of transgender recognition in India. A complete understanding of how transgender people engage with and contribute to entrepreneurial fields – particularly social entrepreneurship – is lacking, as evidenced by the highlighted research gap. The problem statement emphasizes the stigma, discrimination, and lack of chances that transgender people experience, especially in the workplace. The study aims to comprehend the obstacles encountered by transgender people in the field of social entrepreneurship, pinpoint variables that impact these obstacles, and offer creative concepts for self-determination. Using two case studies from Delhi and Noida, the study methodology combines exploratory, descriptive, and ex-facto research methods. For background, the demographic characteristics of transgender people in Delhi, Uttar Pradesh, and India are given. The study location of Noida was chosen using non-probability selection, and main fieldwork involving in-

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person interviews with transgender entrepreneurs was carried out. The case studies' conclusions highlight the transgender women entrepreneurs' inventiveness and tenacity in facing social obstacles. In the first case study, a tea company in Delhi serves as a metaphor for the value of independence, imagination, and community support. In the second case study, a transwoman in Noida selling her own millet biscuits and fruit jam is the subject of the difficulties she faces in building trust, getting financing, and education. The study reveals critical characteristics, such as resilience, egalitarian ambitions, community awareness, and innovative problem-solving, displayed by transgender people involved in social entrepreneurship. The creative approaches to advancing transgender empowerment include community centers, crisis intervention programs, technology and innovation, employment diversity, healthcare access, legal advocacy, media representation, education initiatives, arts and culture, technology and innovation, political engagement, and family support services. The conclusion emphasizes the resilience and creativity of transgender business owners and stresses the significance of comprehending the particular difficulties they encounter. The study's limitations are noted, and future research, regulatory implications, training programs, support networks, and the entrepreneurial ecosystem are all covered.

Keywords: Case Studies, Delhi, Empowerment, India, Noida, Social Entrepreneurship; Transgender

Introduction

Everybody has a gender identity; in modern India, there are three categories of gender: transgender, female, and male. In Indian society, the honorable Supreme Court of India established the "third gender" status for hijras (kinnar) or transgender people in April 2014 with a historic ruling (NLSA v. Union of India, 2014). When referring to people whose gender identity, gender expression, or behavior does not match their biological sex, the word "transgender" is frequently used as a catch-all (Pinki, Duhan, & Pavithra, 2020). Within NALSA Act, 2014 emphasis was laid on empowering Transgender (TG). Empowerment is a broad term showcasing multi-dimensions through which a person can be empowered. In reality, there is social, economic, political, and legal empowerment of transgender. This study particularly focuses on Social Entrepreneurship as one of the main economic factors that affect transgender empowerment. Researchers have included Social Entrepreneurship under the bracket of transgender employment since employment is one of the indicators to measure economic empowerment. According to published research, social entrepreneurship falls under the category of self-employment underemployment. The notion of entrepreneurship has transformed, now including a wide array of actions people do to launch, oversee, and develop company endeavors. derived from the French verb "entreprendre," which means "to take on" or "to set out." In the past, this phrase was used to characterize people who took the initiative, risks, and duties involved in setting up and running a business to turn a profit. The fundamental transition of low-income, primary-sector-based societies into high-income, service – and technology-based societies is largely dependent on entrepreneurs. Wennekers and Thurik (1999) delineate thirteen distinct roles of an entrepreneur, reflecting the diverse perspectives on entrepreneurship found across various disciplines, from social anthropology to organizational theory to mathematical economics (Henrekson, 2007). Schumpeter (1950; 1961) from the behavioral economics standpoint defines an entrepreneur as the coordinator of production and an agent of change, emphasizing innovation and the concept of 'creative destruction.' Schultz (1975) broadens the definition, considering entrepreneurs as individuals capable of identifying economic imbalances, evaluating them, and reallocating resources if deemed worthwhile. Kanbur (1979) views entrepreneurs as those managing the production function, bearing the risks and uncertainties while paying workers wages. Economics typically approaches entrepreneurship through occupational, behavioral, or outcomes definitions. The occupational definition identifies entrepreneurs as self-employed, measured either statically (by the number of self-employed individuals) or dynamically (through startup rates) (Wennekers and Thurik, 1999). This perspective recognizes that some individuals enter self-employment out of necessity due to a lack of wage employment, while others choose self-employment to exploit perceived opportunities (Global Entrepreneurship Monitor, GEM). The distinction between necessity and opportunity entrepreneurs is crucial in entrepreneurship measurements. Exiting self-employment doesn't necessarily indicate failure, as highlighted by Andersson (2006). Kanbur (1979) and Jovanovic (1982) argue that new entrepreneurs may not initially grasp the extent of their entrepreneurial abilities. Through their experiences in self-employment, they gain a clearer understanding and can choose to continue or exit. Ericson and Pakes (1995) suggest that entrepreneurs identify potentially profitable opportunities but must invest to learn their true value. Exiting occurs when the returns on investment are smaller than opportunity costs. Over time, the concept of entrepreneurship has evolved, encompassing a broader spectrum of activities and characteristics related to business innovation, creativity, and risk-taking. It has emerged as a dynamic force propelling economic growth, innovation, and societal change. Choudhary's (2018) research study's findings demonstrated how gender disparity is ingrained in many facets of Indian life, including work, education, opportunities, income, health, social dynamics, cultural challenges, and economic problems. Transgender individuals were enmeshed in an excruciatingly painful loop, whereby at one extreme of the spectrum were the diverse forms of violence – emotional, mental, and even physical – that they encountered daily (Babbar, 2016). This research paper delves into social entrepreneurship in the context of transgender individuals. In recent years, the term social entrepreneur has become increasingly common in academic and business circles. Social entrepreneurs engage in a variety of activities, but always to solve social problems. Social entrepreneurs are not merely people who perform acts of charity; they have an evident desire to improve social well-being and develop projects with long-term vision. The creation of sustainable social value is a key characteristic that differentiates them from other entrepreneurs.

Research Gap

Although entrepreneurship has been examined in great detail in a variety of settings, there is still a clear knowledge vacuum about how transgender people interact with and contribute to various entrepreneurial fields. The literature that currently exists tends to ignore the particular difficulties and chances that transgender entrepreneurs encounter, especially in the fields of social entrepreneurship. When considering the characteristics necessary for transgender social entrepreneurs, the impact of transgender social entrepreneurship on societal structures, and the motivations driving transgender empowerment and entrepreneurship, the research gap widens. To gain a more thorough understanding of how entrepreneurship empowers transgender people and promotes positive societal change, it is imperative to close this research gap.

Statement of Problem

People who identify as transgender frequently face stigma, discrimination, and limited possibilities in a variety of spheres of life, including the workforce. The unique difficulties encountered by transgender entrepreneurs and the possible answers they offer are not fully covered by the corpus of entrepreneurship study that currently exists. By examining the subtleties of transgender entrepreneurship, particularly in the social environment, and comprehending how it might promote greater societal well-being, this research seeks to close this knowledge gap.

Objective

- To understand the challenges faced by transgender individuals in the realm of social entrepreneurship in Delhi and Noida.

- To identify the factors influencing transgender entrepreneurship and empowerment in Delhi and Noida.
- To provide innovative ideas to promote transgender empowerment across various aspects of life in general.

Research Questions

- What are the different types of entrepreneurship?
- What is the difference between invention and innovation according to respondents?
- What are the essential traits exhibited by transgender individuals engaged in social entrepreneurship?

Research Methodology

Researchers have defined this study under three sub-categories of Research: Exploratory, Descriptive, and Ex-facto research. Two case studies from Delhi and Uttar Pradesh have been chosen by researchers. The two respondents who were the subject of these case studies were Assamese or Bihar migrants. The entrepreneurs in the food industry are the subject of both case studies. In one case study, transwomen sold several tea kinds, while other transwomen sold handcrafted millet cookies with fruit jam. They were both organic items. Through NGO networking, research has gathered information on these two transwomen business owners. For their final thesis project, "Transgender Empowerment in India with Special Reference to Uttar Pradesh," researchers interviewed 400 transgender people. And, this paper is the part of researcher's main thesis work.

According to the 2011 Census of India, Uttar Pradesh has the highest number of transgendered people in India (137465), whereas Delhi has the largest transgender population (4213)among the Union Territories. Nevertheless, there is no data accessible at the district, tehsil, or block levels. The transgender demographic profile according to the 2011 Indian Census is shown in the below tables.

Demographic Profile of Transgenders in India

S. No.	Particulars	Total (Number and Percentage)
1.	Population	487,803
2.	Literacy	56.07%
3.	Child Ratio	54,854
4.	SC	78,811
5.	ST	33,293

Demographic Profile of Transgenders in Uttar Pradesh (State)

S. No.	Particulars	Total (Number and Percentage)
1.	Population	137465
2.	Literacy	55.80%
3.	Child Ratio	18734
4.	SC	26404
5.	ST	639

Demographic Profile of Transgenders in Delhi (Union Territory)

S. No.	Particulars	Total (Number and Percentage)
1.	Population	4213
2.	Literacy	62.99%
3.	Child Ratio	311
4.	SC	490
5.	ST	0

Source: Census of India, 2011

Note: Researchers have not explained the tables as they are self-explanatory.

Furthermore, Noida, Uttar Pradesh, was selected by non-probability sampling since it is a city inside the Gautam Buddha Nagar District of Delhi NCR. Gautama Buddha is separated among the three Tehsils (sub-divisions) of Dadri, Jewar, and Noida. It is a part of Delhi NCR. Primary fieldwork was used to gather all data, and in-person interviews with respondents were conducted. The researcher and respondents decided on an interview schedule and the location for the in-person interviews based on the respondents' willingness to participate. Most of the interviews took place in Delhi and Noida at NGOs. The interview took the responders one hour and forty-five minutes to complete. Hindi responses were given to these queries. Following the completion of the interviews, they were also translated into English. The data were analyzed using content analyses

Different Categories of Entrepreneurship in India According to Case Studies

Small Business Entrepreneurship	It involves launching and running small companies. on the needs of the community and local markets. Examples include neighborhood stores, eateries, and service providers.
Scalable Startup Entrepreneurship	It strives for scalability and quick growth. frequently incorporates cutting-edge commercial concepts or technology. looks for angel and venture funding. Examples include cutting-edge software and IT firms.
Social Entrepreneurship	It focuses on environmental or social issues. focuses on having a beneficial impact on society. frequently uses a hybrid or non-profit business model. Social entrepreneurs and fair trade companies are two examples.

Corporate Entrepreneurship	It takes place in well-established businesses. involves staff members in the launch of new initiatives or departments. intends to promote innovation inside a bigger company. Examples include Google's "20% time" policy, which permits staff members to work on side projects.
Serial Entrepreneurship	It involves people who launch several firms over time. Entrepreneurs create companies, sell them, or go on to start new ones. frequently motivated by a desire for ongoing innovation. Elon Musk and Richard Branson are two examples.
Online Entrepreneurship (E-Entrepreneurship)	It conducts business primarily or exclusively online. Utilizes digital platforms for sales and marketing. Examples: E-commerce stores, and digital marketing agencies.
Technology Entrepreneurship	It concentrates on creating and promoting novel technology. involves invention, development, and research. Examples include hardware development and biotech startups.
Green Entrepreneurship	It focuses on environmentally conscious and sustainable enterprises. intends to lessen its ecological impact. Examples include green products and startups focused on renewable energy. I can reuse my disposal.
Cultural Entrepreneurship	It includes endeavors in the creative industries, arts, and culture. Encourage and profit from cultural products. Examples include creative agencies, art galleries, and cultural events.
Innovation-Driven Entrepreneurship	It focuses on developing and launching cutting-edge goods and services. demands a significant focus on research and development. Examples: Businesses launching innovative technology.
Economic Entrepreneurship	The formation and management of firms with the primary objective of creating wealth and promoting economic development is the main focus of economic entrepreneurship. Entrepreneurs in this category usually aim to achieve financial sustainability, employment creation, and business sector expansion.
Traditional / Conventional Entrepreneurship	Conventional entrepreneurship entails founding and operating companies that follow accepted norms in a certain sector or area. These companies are frequently handed down through the generations, sticking to traditional procedures and practices.
Media Entrepreneurship	A specific type of entrepreneurship called "media entrepreneurship" focuses on starting and running businesses in the media sector. Businesses engaged in the production, dissemination, and communication of material across a range of media platforms can fall under this category.

Source: Field Survey, September, 2023

Difference between Invention and Innovation according to Case Studies

Particular	Invention	Innovation
Definition	The term "invention" describes the first production of a novel good, method, or concept.	Innovation involves the process of taking an existing idea or invention and refining, improving, or adapting it to create value

Particular	Invention	Innovation
Focus	Originating fresh concepts and coming up with new ones.	Generation of new ideas and the development of original concepts.
Timing	Usually, inventions are the first examples of a certain concept or item.	Innovations can come in many forms, such as the development of new business models or the enhancement of already-existing inventions.
Example	The development of electric cars is an innovative response to environmental concerns.	The development of electric cars is an innovative response to environmental concerns.

Source: Field Survey, September, 2023

Case Study 1: Trans women Entrepreneur in Delhi, Engaging in the Sale of Varieties of Tea

A transgender woman who graduated with many hopes, the 26-year-old left her home in Assam for Delhi after her family began to doubt her authenticity. She was the only one who traveled to Delhi. She began her modest business venture close to Delhi's streets. She was given the first real opportunity to launch her tea business on campus by a few academics and faculty members of one of Delhi's most prestigious colleges. She sold tea in a variety of flavors. She carries around 20 different types of tea, all of which have Food Corporation certification. She sold a range of perfumes in addition to tea, as well as other edibles like aam papad, ramladoo, Khathi meethi goli, etc. *"I am the labor, the producer, the investor, and the organization; I make all the products that I sell by myself."* "*Aside from my ingredients, I had trouble finding affordable airtight containers and glass bars." "If I buy the same containers in bulk or smaller quantities, shopkeepers charge between Rs. 6 and Rs. 12, and the cost of larger containers varies between Rs. 30 and Rs. 60," I was told. I attempted to purchase those containers in large quantities. Plastic containers are also an option, but I don't want to use them since I want to promote organic products from the inside out, starting with the outer packaging. discussing her components. They brought ingredients from her hometown, which she uses mostly for her business.* Every business experiences ups and downs, so when she found herself alone in her new home, she began to rely on others for support. She was able to obtain housing in Garima Greh through some members of her trans community. When the G-20 summit took place in Delhi, she said, *"I got the chance to have my stall in front of Prime Minister Shree Narendra Modi Ji, that was the biggest moment of my life. The customers who had tasted my Tea praised me, and gave me several contact numbers from where I can take financial aid."* From her tea business, she earns between \$15,000 and \$20,000 per day, with a monthly income that can range from \$30,000 to \$60,000. She charges Rs 120 for a whole bottle of tea. Returning to the location of my stall, she lost her documents and her cell phone in haste near her shop when she first started her business. She misplaced all pertinent paperwork. Alone in her new home, she began to accept assistance from others. However, she has witnessed the harsh visages of the masses. She visited the Garima Greh once more. Now, one would wonder, what exactly is Garima Greh? The Indian government has built a free transgender refuge house. "*Yes, I felt horrible about what had happened, but what should I do now? Should I cry or start over? I decided to start over because I am a social entrepreneur working for social change and I wanted to encourage everyone who is a part of a group that is as miserable as the trans community."* What are the key characteristics that transgender people should possess to engage in social entrepreneurship? the researcher questioned her. *"Aim of doing something good for society,"* she replied with a smile. A transgender woman I met in the metro told me she wanted to open a pickle business and wanted to hire at least five people, regardless of gender. When I asked why she thought all genders should be employed, she said, *"I don't want our community members should be out of the main society If society is dragging us out being non-binary, let us try our best, to do something for society as we are the vulnerable community."* This is not to say that *"I have accomplished much, but I have started something positive for both myself and society." "I am buying my containers and other stuff required for my business from those men and women who are older in age and surviving on their own," the transwoman said, drawing inspiration from her.* She is considering beginning her business again, but she needs financial assistance. After it is up and running, she plans to reinvest her profits in purchasing new supplies. In response to a question regarding the qualities that transwomen should possess, she emphasized how important it is to have the resilience to overcome obstacles, particularly in our situation because we have experienced discrimination from the beginning of our lives.

Second, although we are behind them in terms of education and skill set, we are nonetheless equal to other men and women in that we are capable of accomplishing the tasks at hand with our hands and thoughts. Creating inclusive and pertinent social projects requires a profound awareness of transgender concerns, cultures, and diversity, which we possess in comparison to them. "We are members of the community." Furthermore, confronting social issues frequently calls for bravery, especially when speaking out against established conventions and promoting inclusivity. *"I don't think so; we are all not that strong and are unable to handle the difficulties we have encountered."* We also require creative thinking and effective networking. Developing robust networks both inside and outside of the transgender community facilitates the formation of alliances and the acquisition of support for social projects. Social entrepreneurship requires the development of novel and inventive solutions to deal with the particular problems that the transgender population faces. The capacity to promote social inclusion and transgender rights is one of the other qualities that transgender social entrepreneurs should possess. Under the Transgender Persons Protection Bill of 2020, trans women and transgender people requested equality in the workplace. *"Social entrepreneurs must be adaptable to changing social landscapes and be open to adjusting their approaches to meet evolving needs," I must remark, drawing from my own experience*." Researchers have inquired about the potential obstacles encountered during her social entrepreneurship journey. *"The reception of transwomen entrepreneurs might be impacted by social norms and prejudices. As an example, during the early stages of my business, a man operating a stall nearby refused to see me, despite my drawing a sizable crowd." "I encounter obstacles unique to my gender, such as prejudice and restricted financial resources."* Getting finance can be difficult, especially for transgender firms from the public and commercial sectors. The government supports our community, but complicated regulations and red tape can make social entrepreneurship difficult. *"I have firsthand experience with how a business's location and accessibility can affect its success."*

After this open-ended interview, the researcher questioned her about the factors influencing social entrepreneurship. She retorted, *"Small business success depends on having enough money."* Programs for education and training that promote entrepreneurship, It is essential to have a nurturing environment with networking opportunities, mentors, and incubators. A climate with favorable regulations makes commercial operations easier. However, we had trouble obtaining these components. Finally, what fresh, creative concepts would you like to incorporate into your social entrepreneurship? *"This time, I'm going to buy an electronic kettle or Petromax and make tea before selling it. I've decided to keep the price per cup at Rs 20 for small, Rs 40 for medium, and Rs 60 for large. Previously, I was simply selling tea powdered."* The conversation concludes with the researchers discussing her unique and upbeat ideology.

Case Study 2: Trans women Entrepreneur in Noida, Uttar Pradesh, Engaging in the Sale of Homemade Millet Cookies and Fruit Jam

A 28-year-old transwoman who moved to Noida, Uttar Pradesh from Bihar to start her own business began making her cookies and jam. She travels around to the market to sell her goods. She produces organic goods. *"I support organic and healthful products. I make them with common ingredients like wheat and millet. I have different kinds of Jam made of pineapple, apple, orange, and kiwi."* One Jem bottle costs Rs. 150, and depending on the flavor, a box of cookies costs between Rs. 150 and Rs. 200. Her garden provides the majority of the ingredients. She raises most of the raw materials required as ingredients in her modest garden in her hometown. She just added the brand name "New Bharat" for her goods. In contrast, to the trans women in the first case study, this trans woman has the support of her family, she contributes a portion of her earnings – that is, her half of the income – to her family. She lives alone in a rented room in Noida but has connections to NGOs that support the LGBTQ+ community. *"I have taken part in multiple university festivals and received numerous honors and recognitions."* She was questioned by researchers about any difficulties she had as a social entrepreneur. With a smile, she calmly responded, *"Being transgender presents its own set of challenges in society. One of the largest issues I've encountered is a lack of trust, as numerous organizations that have contacted me for events never reimburse me for the quantity of goods I provide."* The majority of the ingredients, which *"I also purchase from vendors, occasionally break, requiring me to fix it and incurring late fees."*

She claimed that although she battled during COVID-19, her family was there for her. After a month, she visits her parents and siblings at home. She had to deal with the issue of funding her company. *"I don't care about what else is going on; time has flown by so much."*

There are two types of people in society: those who encourage you and those who discourage you. The main obstacle in my life is me, *"My challenges will begin the day I stop making efforts for myself."* In addition to psychological difficulties, I have encountered difficulties because of my restricted access to capital as a social entrepreneur. The two main things that influence my social entrepreneurship are my ability to obtain finance and education. *"I faced challenges in exploring new and diverse opportunities since I am only metric pass."* Adding on, according to her, a social entrepreneur should have traits such as innovative ideas, risk-taking behavior, leadership skills, adaptability, persistence, and resilience to overcome challenges. The researchers questioned her about her fresh, creative ideas for managing her business after the interview. She says she will go to different parts of India to expand her social entrepreneurship, work on her adaptability, and try to blend in with a new environment.

Researchers have drawn attention to the positive attitude trans women have toward social entrepreneurship from both case studies; although placing the blame on the government and society, both case studies teach the importance of operating independently. In the first research, trans women aimed to use their creative ideas to expand the scope of their social entrepreneurship. Trans women in a different case study desired to improve their non-adoptability behaviors. They are attempting to empower themselves by plugging the flaws in their system. If they have strong backing and capital in the future, they will be able to hire a large number of employees and launch their franchise.

Innovative Ideas to Promote Transgender Empowerment Across Various Aspects of Life

Education Initiatives: Education Initiatives: Provide inclusive courses that increase knowledge of issues about transgender people. Provide scholarships intended exclusively for transgender people to promote higher education.

Workplace Inclusivity: Promote and put into effect workplace rules that uphold non-discrimination and inclusivity. Establish mentorship programs that pair successful professions with transgender individuals.

Entrepreneurial Support: Entrepreneurial Support: Provide transgender entrepreneurs with financial support and mentorship. Enable transgender-owned businesses to have easier access to training, networks, and resources.

Healthcare Access: Make sure transgender-specific healthcare services are available and reasonably priced. Run educational programs about the rights and health concerns of transgender people.

Legal Advocacy: Encourage and take part in legal actions that defend the rights of transgender people. Strive for comprehensive legal changes that will combat discrimination and advance equality.

Media Representation: Encourage diverse and positive representations of transgender people in the media. Provide forums where transgender voices can be heard to promote compassion and understanding.

Community Centers: Provide community centers and safe locations so that transgender people can interact and support one another. Provide workshops, therapy, and leisure pursuits to improve well-being.

Crisis Intervention Programs: Provide transgender people in crisis with support networks and hotlines. Teach transgender sensitivity to crisis intervention teams.

Sports Inclusivity: Encourage diversity in sports by endorsing transgender teams and athletes. Promote laws that guarantee transgender people the same opportunities to play sports without facing prejudice.

Arts and Culture: Support and provide funding for transgender authors, artists, and entertainers. Plan cultural gatherings honoring the achievements made by transgender artists.

Technology and Innovation: Mentorship programs can help increase the representation of transgender people in STEM professions. Encourage projects aimed at bridging the digital divide and expanding access to technology.

Political Participation: Urge transgender people to participate in politics and community service. Encourage the adoption of laws that guarantee transgender voices are fairly represented in the executive branch.

Family Support Programs: Give families information and guidance so they can better understand and support their transgender members. Launch awareness-raising initiatives to lessen stigma among families.

Global Collaboration: Encourage global collaborations to exchange optimal approaches for empowering transgender individuals. Encourage projects that tackle international problems impacting the transgender population.

Conclusion

In summary, the case studies that were presented highlighted the tenacity and inventiveness of transgender people who are involved in social entrepreneurship in Delhi and Noida, Uttar Pradesh. These entrepreneurs' tales demonstrate the variety of obstacles they encounter, from societal prejudices to restricted financial sources. Notwithstanding these obstacles, transwomen's resolve to improve society, boost the economy, and gain self- and community empowerment is demonstrated in both case studies. With a particular focus on social entrepreneurship in the transgender setting, the paper examines the broader landscape of entrepreneurship and classifies it into distinct forms. It emphasizes how crucial it is to comprehend the unique opportunities and difficulties encountered by transgender entrepreneurs, laying the groundwork for further studies and projects.

Limitations

The two case studies from Delhi and Noida, Uttar Pradesh, which served as the study's foundation may not accurately capture the range of experiences found in India's many areas. A more thorough understanding might be obtained with a larger and more geographically diversified sample. Transgender entrepreneurs' self-reported data serves as the basis for the information collected. Despite efforts to ensure data accuracy, the accounts provided by the respondents may contain bias or inaccuracies. It might be difficult to extrapolate the study's conclusions to all transgender people in India. The variety of experiences that exist within the transgender community may not be adequately captured by the particular circumstances of the people in the case studies.

Implications of the Study and Recommendations for Social Entrepreneurship

- **Policy Implications:** The study makes the case for the necessity of laws that particularly address the difficulties encountered by transgender business owners, including better financing options, welcoming work environments, and anti-discrimination measures.
- **Educational Initiatives**: Raising awareness and implementing educational initiatives that address transgender problems can help to break down prejudices and preconceptions and promote an inclusive society.
- **Support Systems:** Transgender people can benefit greatly from the establishment of support networks, such as community centers and mentorship programs, while they navigate the difficulties of becoming an entrepreneur.
- **Entrepreneurial Ecosystem**: The results highlight the significance of creating an entrepreneurial ecosystem that supports transgender-

owned firms' particular requirements and promotes their expansion and viability.

- **Intersectionality in Research:** To provide a more comprehensive view, future studies on the intersectionality of transgender entrepreneurship should take into account variables including age, education, and geographical variances.

References

Andersson, P. (2006). 'Determinants of Exits from Self-Employment', Essay IV in a Ph.D. thesis in economics, Swedish Institute for Social Research, Stockholm University.

Babbar, S. K. (2016). The socio-legal exploitation of the third gender in India. *IOSR J Humanit Soc Sci*, *21*, 12-8.

Choudhary, R. (2018). A Study of Gender Inequality in India. *Journal of Emerging Technologies and Innovative Research (JETIR),* 5(2), 1139- 1141.

Ericson, R. and Pakes, A. (1995). 'Markov-Perfect Industry Dynamics: A Framework for Empirical Work', *Review of Economic Studies,* 62: 53-82.

Henrekson, M. (2007). 'Entrepreneurship and Institutions', *Comparative Labor Law and Policy Journal,* 28: 717-42.

Jha, E. (2014). NALSA v. Union of India-The Metamorphosis of Gender Recognition in India. *CALJ*, *2*, 48.

Jovanovic, B. (1982). 'Selection and Evolution of Industry', *Econometrica*, 50(3): 649- 70.

Kanbur, S.M. (1979). 'Of Risk-Taking and the Personal Distribution of Income', *Journal of Political Economy,* 87(4): 769-97.

Pinki, P. M., Duhan, K., & Pavithra, N. (2020). Status of transgender in India: A review.

Schultz, T. (1975). 'The Value of the Ability to Deal with Disequilibria', *Journal of Economic Literature,* 13(3): 827-46.

Schumpeter, J.A. (1950). *Capitalism, Socialism and Democracy.* New York: Harper & Row. 44.

Schumpeter, J.A. (1961). *The Theory of Economic Development.* New York: Oxford University Press.

Wennekers, S. and Thurik, R. (1999). 'Linking Entrepreneurship and Economic Growth', *Small Business Economics,* 13(1): 27-55.

ISSN 0971-1864 SPECIAL ISSUE Jan-Jun 2024 pp: 217-228

Digital Financial Literacy and Digital Financial Product usage in Women

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Abstract

Digital financial literacy is growing, highlighting the essential knowledge and abilities required to conduct financial transactions on digital platforms. One notable aspect of digital financial literacy is the increasing adoption of digital payment methods, such as Internet banking, debit cards, credit cards, and mobile banking, which are experiencing a surge in value. The use of digital payments has been rising exponentially, thanks to several joint initiatives between the public and commercial sectors and competition amongst financial services providers. As mobile banking becomes more widespread in the future, there will be intense rivalry for digital savings and borrowing solutions. Despite the anticipated benefits of financial technology (FinTech) in promoting financial inclusion and enhancing financial literacy, numerous obstacles persist. The research aims to ascertain the level of digital financial literacy and the extent of use of digital financial services among women. A 84-woman sample was randomly selected. The survey employed a well-structured questionnaire to collect and produce data on digital financial literacy. Subsequently, the study focused its attention on the use of digital financial products. Our research indicates that having a solid understanding of financial concepts greatly enhances the adoption and use of digital financial services.

Keywords: Digital Finance, Digital Financial Literacy, Digital Financial Products, Use of Digital Financial Products

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Introduction

Digital financial literacy encompasses the knowledge and understanding of financial concepts, as well as the ability to effectively navigate and utilize digital platforms and abilities (Tony, N & K. Desai, 2020). In the past, there was a focus on enhancing financial literacy in order to promote financial inclusion and stimulate economic growth. Financial literacy refers to the comprehensive understanding, awareness, expertise, mindset, and actions required to make wise financial choices and eventually attain personal financial prosperity. The report was approved by G20 Leaders and published by OECD/INFE in 2012. The source of this information is the OECD in the year 2018. Currently, the digital economy necessitates a comprehension of "Digital financial literacy," which encompasses an understanding of the various aspects of digital financial literacy. This includes knowledge of digital financial products and services, awareness of the potential risks associated with digital finance, understanding how to mitigate these risks, and being familiar with consumer rights and procedures for seeking compensation in case of any grievances (Peter J. Morgan et al., 2019). The Indian government has undertaken several steps to facilitate the transition of the country into a digitalized state, including as the implementation of Aadhar identity, PMJDY, Digital India, and Demonetisation. The COVID pandemic has had a significant impact on the use of physical currency, leading to a transition towards a cashless economy. The banking industry is currently reintroducing innovative solutions, providing a wide range of services.

Mobile payment is a secure, convenient, and accessible method of payment that uses electronic devices instead of computer terminals. It is widely accepted worldwide and is part of modern banking systems. The use of mobile payments increased during COVID, according to Ministry of Electronics & IT statistics (2023). India's digital payments landscape has experienced substantial growth over the past eight years, with the transaction value increasing from 316 crore in 2014-15 to 8,840 crore in 2021-22. This growth may be attributed to developments in technology and the implementation of forward-thinking government policies. Studies indicate that almost one-third of Indian families utilize digital payment methods, and it is anticipated that the implementation of online dispute resolution solutions would further enhance this trend. According to the OECD 2018 findings, gender-based digital exclusion arises from obstacles to entry, insufficient financial and digital knowledge, and societal norms. Women exhibit a 26% lower likelihood of possessing a smartphone on a global scale, whereas there are an additional 327 million men who possess one. India exhibits a disparity in financial service utilization between genders. Based on a poll performed by the Securities and Exchange Board of India (SEBI), a mere 23 per cent of Indian women possess awareness regarding financial planning and investing (Basudha Das, 2023). The G20 Leaders Declaration in 2012 highlighted the need for women and youth to access financial services and education. Digitalization of financial services can help empower women, especially in developing countries. Women often face additional barriers to accessing financial services, including lower financial knowledge, limited access to education, employment, entrepreneurship, formal financial markets, and disadvantageous social norms. The Humanity Welfare Council reports that 80 per cent of women in India struggle with financial literacy, and around 62% do not own bank accounts or have limited access to banking services. (Economic Times, 2023, March 8)

Ensuring that women are educated about financial matters is the primary concern that needs to be tackled to promote total financial inclusion and foster economic growth and development on a global and digital scale. Examining their financial literacy, digital financial literacy, and utilization of mobile payment applications is crucial at present. The work is organized into three sections: Section 2 focuses on the literature review, Section 3 covers the research methods, and Section 4 addresses the analysis and interpretation.

Literature Review

"Digital Financial Literacy enables the inclusion of individuals in digital financial services." Financial literacy, safeguarding consumer rights, and ensuring access to financial services are crucial for empowering individuals and maintaining stability in financial markets and economies. This is especially important given the rapid technological advancements and the growth of digital financial services. (Tony, N., & K. Desai, 2020). Women entrepreneurs that possess a greater level of proficiency in digital financial knowledge are more inclined to utilize official banking channels. The citation provided is from Hasan.R et al. in 2022. Higher socioeconomic status has a beneficial impact on one's level of digital financial literacy. Maman Setiawan's study on digital financial literacy reveals its impact on spending and saving behavior. The study specifically examines the behavior of millennials in Indonesia, highlighting the need to consider social factors beyond income and education. Additionally, the study emphasizes the importance of measuring other control variables that influence digital financial literacy. The study was conducted among millennials in Indonesia and can also be undertaken specifically for women (Maman Setiawan et al 2020).

India exhibits gender parity in account ownership. The utilization of accounts has experienced significant growth since 2017, primarily due to the increasing adoption of digital payment methods, which are now being used by 35 per cent of adults in India. Nevertheless, there is still potential for expansion in order to achieve the average digital payment adoption rate of 57 per cent observed in developing economies. Furthermore, there exists a substantial disparity of 13 percentage points in the adoption of digital payments between men and women. Implementing digital payment systems could encourage the utilization of bank accounts by the 160 million individuals in India who currently make cash payments for their utility bills. These and other initiatives could potentially reduce India's proportion of dormant accounts, which currently stands at 35 per cent, a figure that is seven times greater than the average observed in all other emerging nations.(Kappler et al., 2021).

According to Deepa Bhatia, the General Manager of YouGov India, a significant number of urban Indian women currently utilize digital payment applications, and it is anticipated that even more will transition to a completely cashless mode of payment in the future. This renders them a highly profitable demographic for anyone involved in the digital payment solutions industry. Hence, comprehending the demographic characteristics and attitudes of the audience is crucial for marketers aiming to focus on this exceptionally involved group of consumers. Google Pay was the most favored application for digital transactions, with 43% of females in India choosing it as their primary choice, followed by Paytm with 30%. PhonePe, Amazon Pay, and BHIM have significantly lower popularity among Indian women, with percentages of 13%, 10%, and 3%, respectively (Sanjeev Sinha, 2021). In her study, Dilruba Afroze highlights the potential for investigating the impact of Mobile Financial Services (MFS) on individuals' lives and the extent to which MFS can empower vulnerable groups, particularly women. She identifies a research need in this area. (Afroze, D. and Rista, F.I. 2022). The proportion of males utilizing mobile payment applications and promoting financial inclusion is greater than that of females (Neelam and Sonali Bhattacharya, 2023).

Research Methodology

The data in this study were acquired by an online structured questionnaire. Utilizing the convenient sampling technique, each respondent was deliberately chosen to complete the questionnaire. The data collection for this study was conducted between July and November 2023, with a total of 120 participants. A total of 84 respondents were included in the study due to the presence of missing values and incorrect responses. The study examines three variables: Digital financial literacy, Application of digital financial literacy, and decision making (Financial behavior). Digital financial literacy is assessed based on one's proficiency in digital technology, understanding of financial concepts, and familiarity with digital financial services. The variables were assessed using many indicators as utilized by Ravikumar et al (2022).

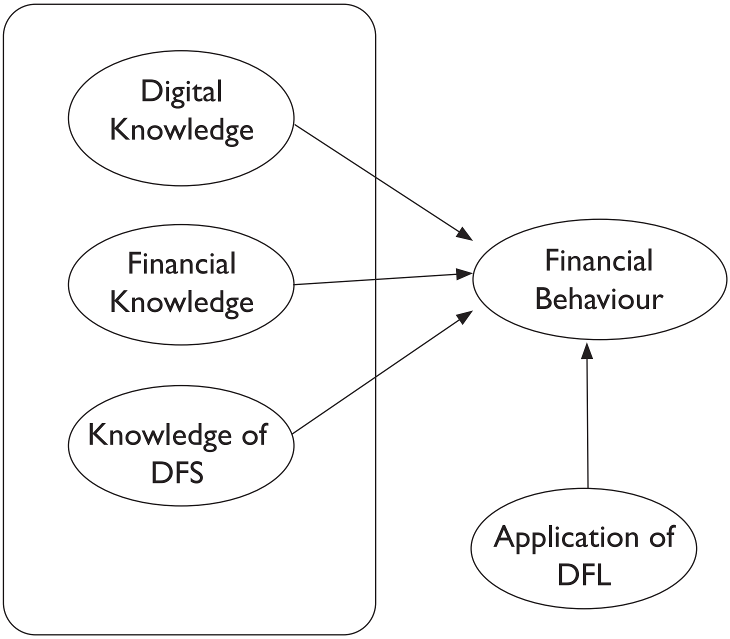
Description of Items

Dimension	Item Description
Digital Knowledge (DK)	I can search online using my device (mobile/ laptop)
	I can send and receive emails on my own
	I shop online
Financial Knowledge (FK)	I prepare budget for my own finances every month
	I tend to live for today and don't worry about tomorrow
Knowledge of Digital Financial Services	I am aware of digital payment methods like GPay, Amazon pay,
	Phonepe, Paytm, UPI etc.
	I know about online trading of financial securities
	Insurance products can be purchased online
Application of Knowledge and skill (APP)	I manage the day to day finances of my home using digital platforms
	I can decide on the type of digital financial products/ services that help in the accomplishment of my financial goals
	I would like to use the best of my financial and digital knowledge and skill while I deal with DFS
Financial Behavior (FB)	I would like to practice positive financial behaviors such as responsible borrowing, savings for emergencies, etc
	I never borrow money for the abnormal rate of interest even though my situation compels me using DFS

A survey was devised including of three sections. Section 1 focuses on gathering information about the personal attributes of the participants, including their age, marital status, educational background, occupation, annual income, and workplace location. On the other hand, section 2 assesses the level of digital financial literacy among women. This section consists of statements that are rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

These statements assess 5 dimensions, namely Digital knowledge, financial knowledge, knowledge of digital financial services, practical application of knowledge and skills, and financial behavior. The questionnaire uses these statements to measure these dimensions. The scale is derived from the research conducted by T Ravikumar, B Suresha, N Prakash, Kiran Vazirani, and T.A. Krishna in 2022. The data was analyzed using JASP, a free, open-source, cross-platform statistical software.

Conceptual framework of digital financial literacy, application and decision making

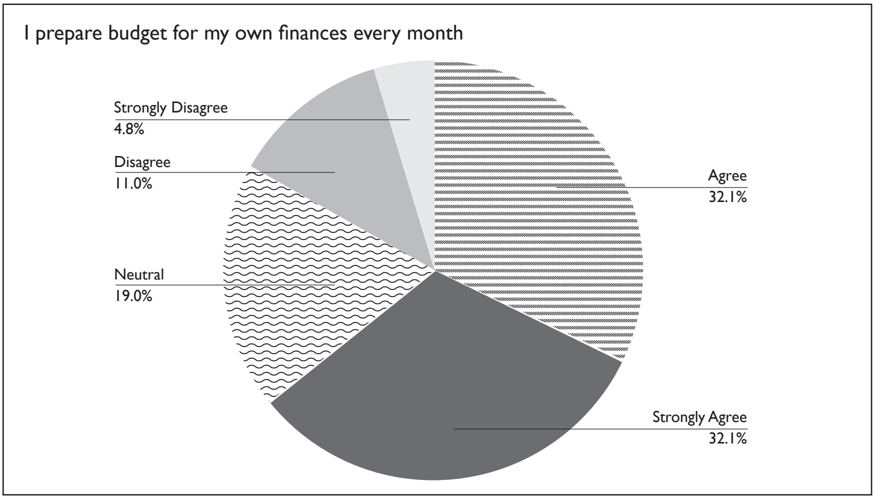


Analysis and Interpretation

Demographic Description of Respondents

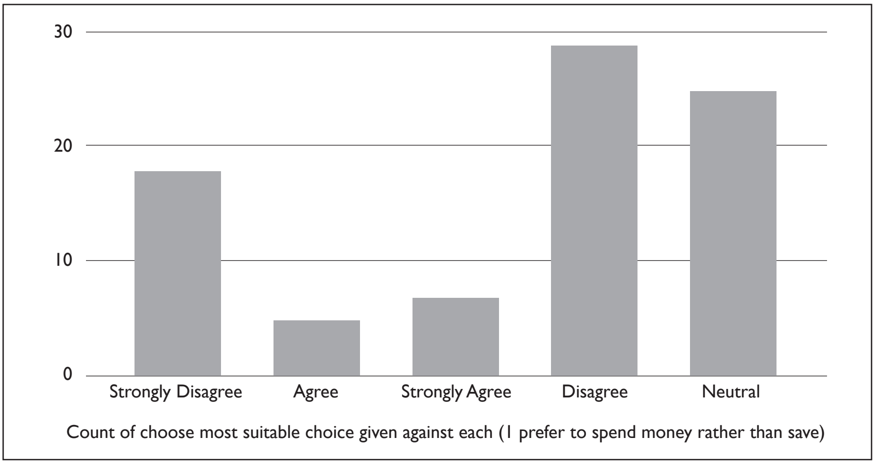
The study consists entirely of females who live in Hyderabad. The age group of 18-25 constitutes the largest proportion of the sample, accounting for 41.7%, followed by the age group of 26-35, which accounts for 33.3%. Most respondents are unmarried, making up 55.4% of the sample, while the remaining 44.6% are married. The predominant educational qualification among the respondents is Post Graduates, accounting for 52.4% of the sample. This is followed by Graduates at 25%, Doctorates at 15.5%, and intermediate and SSC at 3.6%. The primary participants consist of individuals employed in private organizations (50%), followed by students (28.6%), those employed in public organizations (10.7%), homemakers (6%), and self-employed individuals (4.8%). The income distribution in the survey was based on the tax slab rates. Among the respondents, the largest group consisted of students (28.6%) and homemakers (6%). The majority of respondents reported having no income (32.1%), followed by those earning less than 3 lakhs (31%), 3,00,001-6,00,000 (23.8%), 6,00,001-9,00,000 (9.5%), 9,00,001-12,00,000 (2.4%), and 12,00,001-15,00,000 (1.2%).

Preparation of Budget



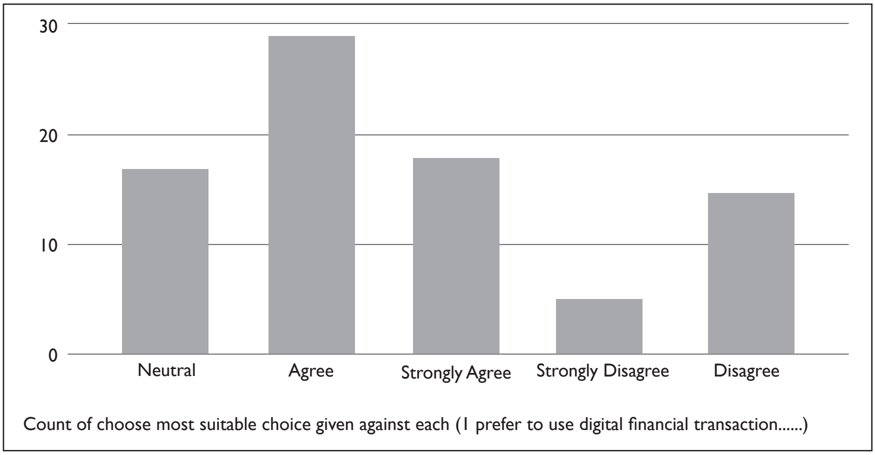
Interpretation: The majority respondents strongly agree (32.1%) and agree (32.1%) that they prepare budget for their own finances every month followed by neutral (19%), disagree (11.9%) and strongly disagree (4.8%)

Spend Money Rather Than Save



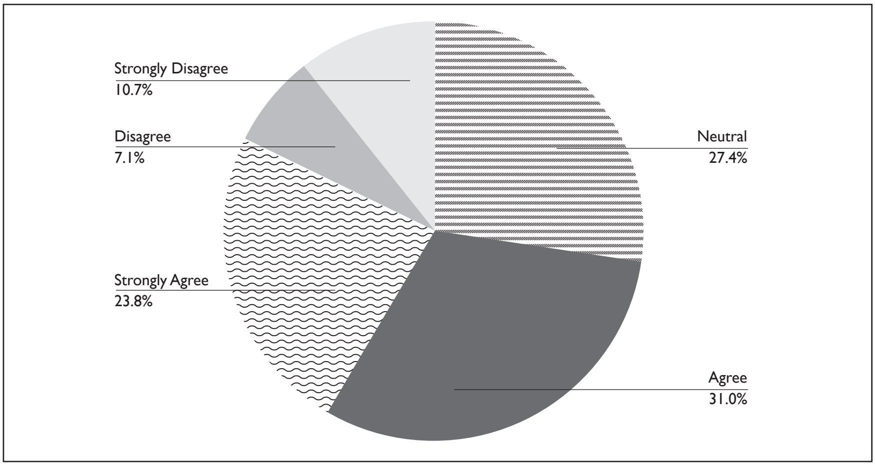
Interpretation: The majority respondents disagree (34.5%) that they spend money rather than save followed by neutral (29.8%), strongly disagree (21.4%), Strongly agree (8.3%) and agree (6%).

Use of Digital Financial Transaction Rather than A Conventional One



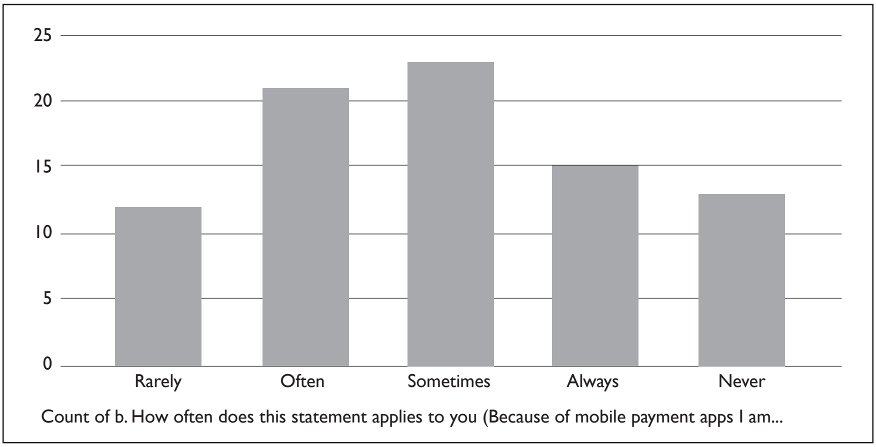
Interpretation: The majority respondents agree (34.5%) that they use digital financial transactions rather than a conventional one followed by strongly agree (21.4%), neutral (20.2%) disagree (17.9%), Strongly disagree (6%).

Continuous Use of Digital Financial Transaction Makes Confident and Error Free



Interpretation: The majority respondents agree (31%) that continuous use digital financial transactions make them confident and error free followed by neutral (27.4%), strongly agree (23.8%) Strongly disagree (10.7%) and disagree (7.1%).

Because of Mobile Payment Apps (Digital financial transaction) unable to Control Expenses



Interpretation: The majority respondents opine sometimes (27.4%) they are unable to control expenses because of mobile payment apps, followed by often (25%), always (17.9%) never (15.5%) and rarely (14.3%).

Model:

This study employs structural equation modeling (SEM) to estimate the relationships between DFL, the application of digital financial knowledge, and financial behavior. Structural Equation Modeling (SEM) is a statistical method used to test hypotheses and assess the validity and goodness of fit of models using latent constructs (Tariqa et al., 2022). All variables have been created as latent variables. Consequently, every variable is formed by utilizing pertinent indicators, as illustrated in the previous table. Figure 2 depicts the structural model of the study, demonstrating the relationship between digital financial literacy and women's financial behavior. This provides a thorough comprehension of the research hypotheses and their consequences.

The Chi-Squared test (CMIN/DF) produced a value of 1.7899, which is lower than the commonly recognized upper threshold of 3. This indicates a strong agreement between the hypothesized structural model and the observed data. In addition, both the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) are close to the minimum criterion of 0.90, indicating that the model well captures the relationships between latent components. In addition, the Root Mean Square Error of Approximation (RMSEA) was computed to be 0.097, significantly above the suggested maximum value of 0.80 (see the below tables). Table-5 presents an intricate examination of route coefficients, elucidating the connections and magnitudes of the suggested influences of digital financial literacy on the financial conduct of women.

Model Fit

				Baseline Test			Difference Test		
	AIC	**BIC**	**n**	χ^2	**df**	**p**	$\Delta\chi^2$	Δ**df**	**p**
Model 1	2977.866	3096.976	84	98.447	55	< .001	98.447	55	< .001

Fit indices

Index	**Value**
Comparative Fit Index (CFI)	0.937
T-size CFI	0.862
Tucker-Lewis Index (TLI)	0.911

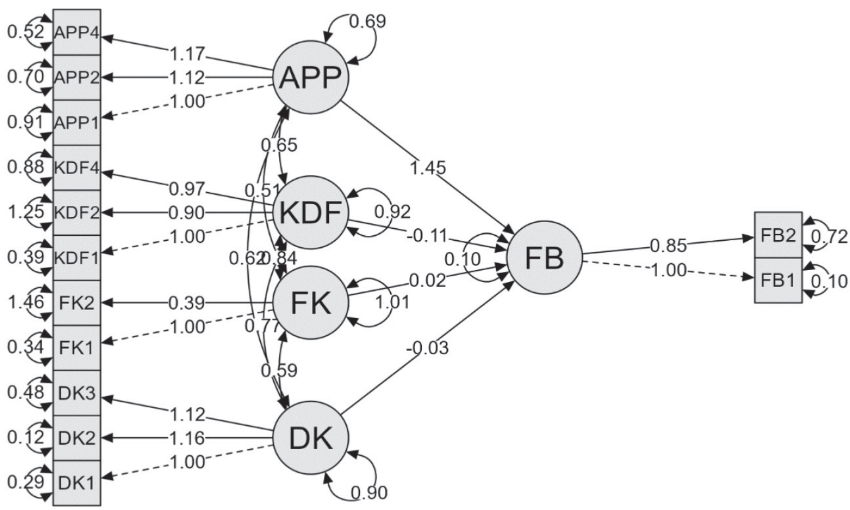
Note. T-size CFI is computed for α = *0.05*. The T-size equivalents of the conventional CFI cut-off values (poor < 0.90 < fair < 0.95 < close) are **poor < 0.783 < fair < 0.858 < close** for model: Model 1.

Other Fit Measures

Metric	**Value**
Root mean square error of approximation (RMSEA)	0.097
RMSEA 90% CI lower bound	0.065
RMSEA 90% CI upper bound	0.128
RMSEA p-value	0.011
T-size RMSEA	0.128
Goodness of fit index (GFI)	0.961

Note. T-size RMSEA is computed for α = *0.05*. The T-size equivalents of the conventional RMSEA cut-off values (close < 0.05 < fair < 0.08 < poor) are **close < 0.089 < fair < 0.113 < poor** for model: Model 1.

Path Diagram



Regression Coefficients

						95% Confidence Interval		Standardized		
Predictor	**Outcome**	**Estimate**	**Std. Error**	**z-value**	**p**	**Lower**	**Upper**	**All**	**LV**	**Endo**
DK	FB	-0.035	0.338	-0.103	0.918	-0.698	0.628	-0.029	-0.029	-0.029
FK	FB	0.023	0.474	0.048	0.961	-0.906	0.952	0.020	0.020	0.020
KDF	FB	-0.114	0.877	-0.130	0.897	-1.833	1.605	-0.095	-0.095	-0.095
APP	FB	1.446	0.429	3.372	< .001	0.605	2.286	1.048	1.048	1.048

The path coefficients of digital knowledge and knowledge of digital financial services on financial behavior suggest a statistically insignificant negative correlation and statistically insignificant positive correlation with financial knowledge. This demonstrates that women's financial literacy has an impact on their financial behavior in terms of expenditure and savings. The path coefficient of 1.446 in the implementation of digital financial services suggests a considerable and positive link with financial behavior. Thus, it may be inferred that the implementation of digital financial services has an impact on the financial conduct of women.

Conclusion

This study aims to examine the impact of digital financial literacy on the financial conduct of women. The findings suggest that there is no substantial link between different components of digital financial literacy, specifically financial knowledge, digital knowledge, and knowledge of digital financial services, and financial behavior. Consequently, this leads to reduced confidence and a lack of capacity to make prudent financial decisions. Comprehending the influence of digital financial technology on spending and saving behavior is essential, making digital financial literacy (DFL) a vital skill. Insufficient saving and spending decisions may not be readily noticeable, although they can have substantial implications for an individual's enduring financial security.

References

Afroze, D. and Rista, F.I. (2022), "Mobile financial services (MFS) and digital inclusion – a study on customers' retention and perceptions", Qualitative Research in Financial Markets, Vol. 14 No. 5, pp: 768-785. https://doi.org/10.1108/QRFM-06-2021-0095

Das Basudha, (2023, March 08) Women's Day 2023: How India is bridging its digital gender gap amid its growth target, *Business Today*. https://www.businesstoday.in/industry/banks/story/womens-day-how-india-is-bridging-its-digital-gender-gap-amid-its-growth-target-372621-2023-03-08

Maman Setiawan, Nury Effendi, Teguh Santoso, Vera Intanie Dewi & Militcyano Samuel Sapulette (2022) Digital financial literacy, current behavior of saving and spending and its future foresight, Economics of Innovation and New Technology, 31:4, 320-338. https://doi.org/10.1080/10438599.2020.1799142

Morgan Peter. J, Huang, Trinh long. Q & ADBI (June 2019), Digital finance promises to be an effective means of reaching the unbanked, but its use must be accompanied by consumer information and education, *Why We Need to Promote Digital Financial Literacy, Development Asia, Policy Brief*. https://development.asia/policy-brief/why-we-need-promote-digital-financial-literacy

Neelam & Bhattacharya (2023), Role of mobile payment apps in inclusive financial growth, *AABFJ*, Vol.17 no. 1, pg-9-31. https://drive.google.com/drive/u/1/folders/1qa_isXV-RTDm5AS1pZWxjGu4zXMv_9I0

OECD (2018) *'G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy'*, pp: 1-25.

Sinha Sanjeev (2021, March 4), Two-thirds of urban indian women use digital payment modes regularly: survey, *Financial Express*. https://www.financialexpress.com/money/two-thirds-of-urban-indian-women-use-digital-payment-modes-regularly-survey-2206174/

T Ravikumar, B Suresha, N Prakash, Kiran Vazirani; T.A. Krishna (2022) Digital financial literacy among adults in India: Measurement and Validation, Cogent Economics; Finance, 10:1, DOI: 10.1080/23322039.2022.2132631

Tony, N.,; Desai, K. (2020). Impact of digital financial literacy on digital financial inclusion. *International Journal of Scientific and Technology Research*, 9(1), 1911-1915.

LIST OF **TRAINING PROGRAMMES 2024-25**

S No	Title of Programme	Programme Date	Programme Director(s)
1	Supervisory Development Programme [for the Executives of MSN Labs]	Apr 15-16, 2024	Dr Sinju Sankar
2	Leadership Excellence Accelerator Programme (LEAP) [for the Executives of Ramky Estates]	Apr 22-24, 2024	Dr Sinju Sankar & Dr Swati Mathur
3	Supervisory Development Programme [for the Executives of MSN Labs]	May 6-7, 2024	Dr Sinju Sankar
4	ESG Reporting and Sustainability	May 8-10, 2024	Prof Ch Lakshmi Kumari
5	Workshop on “Customer Acquisition and Retention”	May 17-18, 2024	Prof Padmaker Jadhav
6	Supervisory Development Programme [for the Executives of MSN Labs]	June 10-11, 2024	Dr Sinju Sankar
7	Happiness and Wellbeing for Managers	June 10-12, 2024	Prof Ujjal Mukherjee & Dr K Bhavana Raj
8	Leadership and Change Management	June 25-27, 2024	Prof A Sridhar Raj & Dr Anupama Dubey Mohanty
9	CSR for High Impact Corporate Performance	July 8-9, 2024	Ms J Kiranmai
10	Supervisory Development Programme [for the Executives of MSN Labs]	July 8-9, 2024	Dr Sinju Sankar
11	Financial Models for Sustainable Excellence	July 9-11, 2024	Dr M Chandra Sekhar
12	New Labour Codes and Industrial Relations	July 24-26, 2024	Dr Vasanti & Dr Anuradha
13	Operations and Supply Chain Analytics for Competitive Advantage	July 24-26, 2024	Dr Abhay Srivastava & Prof S Satish Kumar
14	Supervisory Development Programme [for the Executives of MSN Labs]	Aug 5-6, 2024	Dr Sinju Sankar
15	Project Appraisal, Financing and Management	Aug 7-9, 2024	Prof S Sreenivasa Murthy, Dr M Chandra Shekhar & Dr P Kalyani
16	Analytics for Industry 4.0: Insights of Disruptive Technologies	Aug 12-14, 2024	Dr Shaheen & Dr Rajkumar Pillay
17	Finance for Non-Finance Executives	Aug 20-22, 2024	Dr K V Ramesh & Dr Maschender Goud
18	Emotional Intelligence: The Language of Leadership	Aug 28-30, 2024	Dr Swati Mathur & Prof Y Rama Krishna

S No	Title of Programme	Programme Date	Programme Director(s)
19	Strategic Marketing for Achieving Organization Goals	Sept 4-6, 2024	Dr V Srikanth
20	Supervisory Development Programme [for the Executives of MSN Labs]	Sept 9-10, 2024	Dr Sinju Sankar
21	Employee Engagement and Wellbeing	Sept 11-13, 2024	Dr Vasanthi Donthi & Dr Mohsin Khan
22	The Prevention of Sexual Harassment (PoSH) Act 2013 at Workplace	Sept 17-18, 2024	Ms J Kiranmai
23	Cyber Crime and Safety Measures	Sept 18-20, 2024	Dr A S Kalyana Kumar
24	Restructuring and Turnaround of Public Enterprises for Sustainable Business	Sept 24-26, 2024	Prof S Sreenivasa Murthy & Prof Ch Lakshmi Kumari
25	Diversity Inclusion and PoSH	Oct 3-4, 2024	Prof A Sridhar Raj & Dr Sinju Sankar
26	Supervisory Development Programme [for the Executives of MSN Labs]	Oct 7-8, 2024	Dr Sinju Sankar
27	Digital & Social Media Marketing – A Hands-on Approach	Oct 8-10, 2024	Mr M J Rama Krishna & Dr A Rakesh Phanindra
28	Business Analytics for Decision Making	Oct 8-10, 2024	Dr Rajkumar Pillay & Dr Shaheen
29	Financial Models for Sustainable Excellence	Oct 15-17, 2024	Dr M Chandra Sekhar
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32	Supervisory Development Programme [for the Executives of MSN Labs]	Nov 4-5, 2024	Dr Sinju Sankar
33	Communication for Managerial Effectiveness	Nov 5-7, 2024	Dr Anand Akundy
34	Digital & Social Media Marketing – A Hands-on Approach	Nov 6-8, 2024	Mr M J Rama Krishna & Dr A Rakesh Phanindra
35	Happiness and Wellbeing for Managers	Nov 11-14, 2024	Dr Ujjal Mukherjee Dr K Bhavana Raj
36	Transformational Leadership	Nov 12-14, 2024	Prof Y Rama Krishna & Dr Swati Mathur
37	Valuation of Central Public Sector Enterprises	Nov 19-21, 2024	Prof Pawan Kumar Avadhanam
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39	Consumer Behaviour in Digital Age	Nov 19-21, 2024	Dr Syed Azhar & Dr Swati Mathur

S No	Title of Programme	Programme Date	Programme Director(s)
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42	Data Visualisation Using Power BI	Dec 2-4, 2024	Mr K Srinivas
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44	Cyber Attacks and Cyber Security	Dec 4-6, 2024	Dr Rakesh Phanindra
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50	Finance for Non-Finance Executives	Jan 8-10, 2025	Dr K V Ramesh & Dr Maschander Goud
51	CSR for High Impact Corporate Performance	Jan 22-24, 2025	Ms J Kiranmai
52	Personal Branding and Content Creation	Jan 24-25, 2025	Dr P V Vijay Kumar Reddy & Dr Muzamil Ahmad Baba
53	Sustainable Financial Management	Jan 24-25, 2025	Dr Shweta Mehrotra
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55	Strategic Finance for Leaders in Public Sector Enterprises	Jan 28-30, 2025	Prof Y Rama Krishna
56	Diversity Inclusion and PoSH	Jan 30-31, 2025	Prof A Sridhar Raj & Dr Swati Mathur
57	ESG Reporting and Sustainability	Feb 11-13, 2025	Prof Ch Lakshmi Kumari
58	Sustainable Finance and Risk Management	Feb 21-22, 2025	Dr Shweta Mehrotra
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